		DEPARTMENT (	ATE OF UTAH OF NATURAL RES F OIL, GAS AND I				FOI AMENDED REPO	RM 3			
APPLI	CATION FOR F	PERMIT TO DRILL				1. WELL NAME and Greater	I NUMBER Monument Butte I-1	8-9-17			
2. TYPE OF WORK  DRILL NEW WELL (	REENTER P&A	WELL DEEPEN	N WELL			3. FIELD OR WILD	CAT MONUMENT BUTTE				
4. TYPE OF WELL Oil We	ell Coalbec	i Methane Well: NO				5. UNIT or COMMUNITIZATION AGREEMENT NAMI					
6. NAME OF OPERATOR	WFIELD PRODUCT	TION COMPANY				7. OPERATOR PHO	NE 435 646-4825				
8. ADDRESS OF OPERATOR	t 3 Box 3630 , My	ton, UT, 84052				9. OPERATOR E-M.	AIL crozier@newfield.co	m			
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU-72106		11. MINERAL OWNER	RSHIP IAN STATE (	FEE (	<del>-</del>	12. SURFACE OWN					
13. NAME OF SURFACE OWNER (if box 12	= 'fee')					14. SURFACE OWN	IER PHONE (if box	12 = 'fee')			
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')					16. SURFACE OWN	IER E-MAIL (if box	12 = 'fee')			
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		18. INTEND TO COMI MULTIPLE FORMATIO YES (Submit Co			_	19. SLANT  VERTICAL DI	RECTIONAL 📵 🛚 H	HORIZONTAL 🔲			
20. LOCATION OF WELL	FOO	TAGES	QTR-QTR	SECTI	ION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE	1808 FN	L 790 FEL	SENE	18		9.0 S	17.0 E	S			
Top of Uppermost Producing Zone	1322 FNI	_ 1402 FEL	SWNE	18		9.0 S	17.0 E	S			
At Total Depth	1106 FNI	_ 1638 FEL	NWNE	18		9.0 S	17.0 E	S			
21. COUNTY  DUCHESNE		22. DISTANCE TO NE	AREST LEASE LIN	IE (Feet)	23. NUMBER OF ACRES IN DRILLING UNIT						
		25. DISTANCE TO NE (Applied For Drilling									
27. ELEVATION - GROUND LEVEL		28. BOND NUMBER		29. SOURCE OF DRILLING WATER WATER RIGHTS APPROVAL NUMBE							
5427			WYB000493				437478				
		AT	TACHMENTS								
VERIFY THE FOLLOWING	ARE ATTACHE	D IN ACCORDANC	CE WITH THE U	TAH OIL	AND G	GAS CONSERVAT	ION GENERAL R	ULES			
WELL PLAT OR MAP PREPARED BY	LICENSED SURV	EYOR OR ENGINEER	COM	IPLETE DRI	ILLING	PLAN					
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGREE	MENT (IF FEE SURFA	ACE) FORI	M 5. IF OPE	ERATOI	R IS OTHER THAN 1	HE LEASE OWNER				
DIRECTIONAL SURVEY PLAN (IF DI	RECTIONALLY O	R HORIZONTALLY	г торе	OGRAPHIC	AL MAF	•					
NAME Mandie Crozier		TITLE Regulatory Te	ech		PHON	NE 435 646-4825					
SIGNATURE		<b>DATE</b> 11/24/2010			EMAI	L mcrozier@newfield	l.com				
API NUMBER ASSIGNED 43013505050000		APPROVAL			B	LOS GULL					
					Pe	ermit Manager					

API Well No: 43013505050000 Received: 11/24/2010

	Proposed Hole, Casing, and Cement											
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)								
Prod	7.875	5.5	0	6068								
Pipe	Grade	Length	Weight									
	Grade J-55 LT&C	6068	15.5									

API Well No: 43013505050000 Received: 11/24/2010

	Proposed Hole, Casing, and Cement											
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)								
Surf	12.25	8.625	0	300								
Pipe	Grade	Length	Weight									
	Grade J-55 ST&C	300	24.0		П	Γ						

#### NEWFIELD PRODUCTION COMPANY GREATER MONUMENT BUTTE I-18-9-17 AT SURFACE: SE/NE SECTION 18, T9S, R17E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	0'	1360'
Green River		1360'
Wasatch		5910'
Proposed TD		6068'

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation (Oil)

1360' - 5910'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature Hardness pН Water Classification (State of Utah) Dissolved Calcium (Ca) (mg/l) Dissolved Iron (Fe) (ug/l) Dissolved Sodium (Na) (mg/l) Dissolved Magnesium (Mg) (mg/l) Dissolved Carbonate (CO<sub>3</sub>) (mg/l) Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l) Dissolved Chloride (Cl) (mg/l) Dissolved Sulfate (SO<sub>4</sub>) (mg/l) Dissolved Total Solids (TDS) (mg/l)

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: Greater Monument Butte I-18-9-17

Size	Interval		Weight	Grade	Coupling	Design Factors			
3126	Тор	Top Bottom Weight Grade Coupling		Burst	Collapse	Tension			
Surface casing	0'	300'	24.0	J-55	STC	2,950	1,370	244,000	
8-5/8"	0	300	24.0	J-55	310	17.53	14.35	33.89	
Prod casing	01	6.0601	15.5	1.55	LTC	4,810	4,040	217,000	
5-1/2"	0'	6,068'	15.5	J-55	LTC	2,49	2,09	2.31	

#### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: Greater Monument Butte I-18-9-17

Job	Fill	Description	Sacks	ОН	Weight	Yield	
			ft <sup>3</sup>	Excess*	(ppg)	(ft³/sk)	
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1,17	
Surface casing 500 C		Class G W/ 270 GaGI	161	3070	13.0	1.17	
Prod casing	4,068	Prem Lite II w/ 10% gel + 3%	281	30%	11.0	3.26	
Lead	4,000	KCI	916	30 /0	1120	5.20	
Prod casing	2,000'	50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24	
Tail	2,000	KCI	451	3070	14.3	1,24	

- \*Actual volume pumped will be 15% over the caliper log
- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to Exhibit C for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to  $\pm 350$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

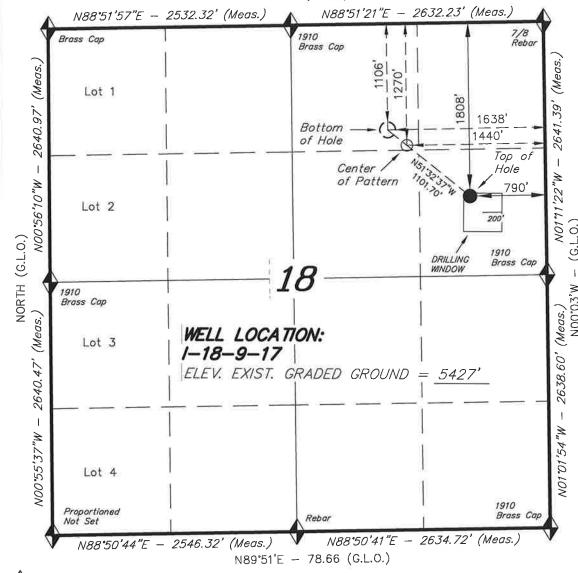
No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

### 10. <u>ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:</u>

It is anticipated that the drilling operations will commence the first quarter of 2011, and take approximately seven (7) days from spud to rig release.

## T9S, R17E, S.L.B.&M.

N89°52'E - 78.57 (G.L.O.)





= SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

I-18-9-17 (Surface Location) NAD 83 LATITUDE = 40° 01' 59.42" LONGITUDE = 110° 02' 33.70"

### NEWFIELD EXPLORATION COMPANY

WELL LOCATION, I—18—9—17, LOCATED AS SHOWN IN THE SE 1/4 NE 1/4 OF SECTION 18, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

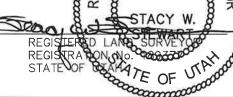
TARGET BOTTOM HOLE, I-18-9-17, LOCATED AS SHOWN IN THE NW 1/4 NE 1/4 OF SECTION 18, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



#### NOTES:

- 1. Well footages are measured at right angles to the Section Lines.
- 2. Bearings are based on Global Positioning Satellite observations.

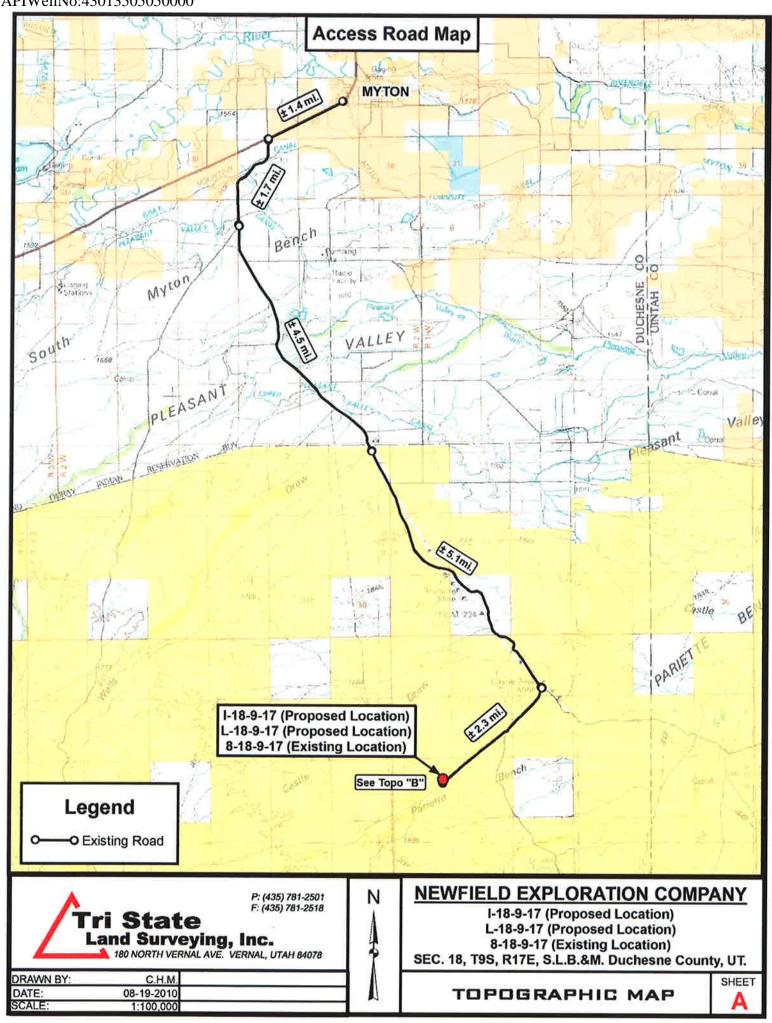
THIS IS TO CERTIFY THAT THE ABOVE PER WAS PREPARED FROM FIELD OF ACTUOL SURVEYS MADE BY ME OR UNDER ANY SUPPRESSION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE WAS BEING. 189377

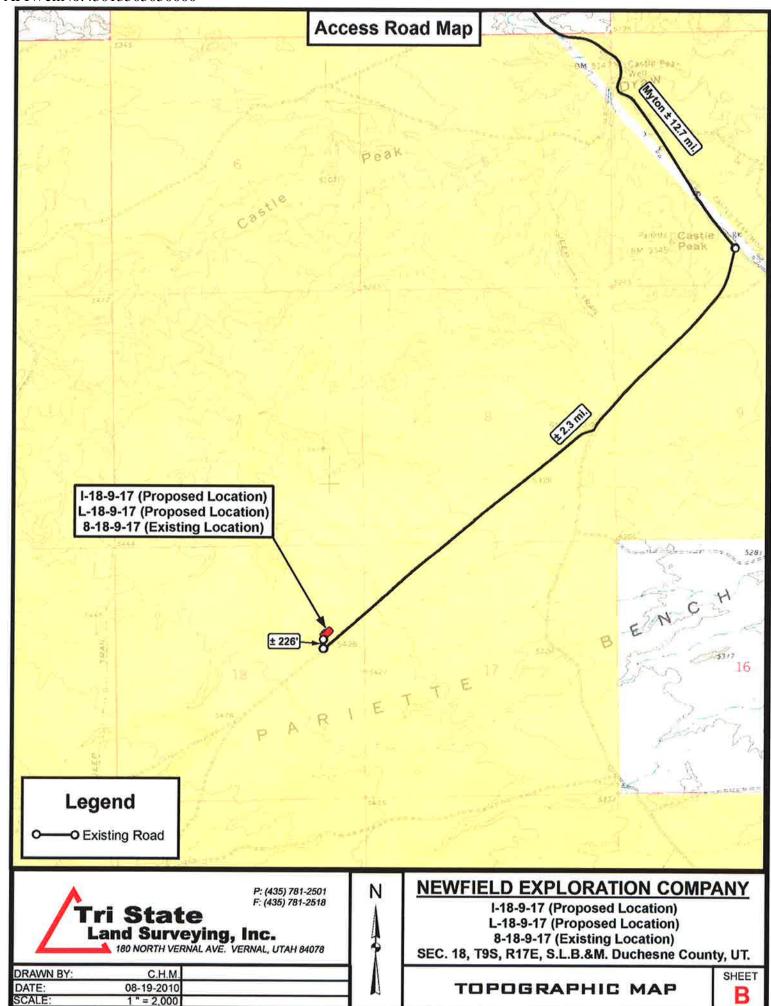


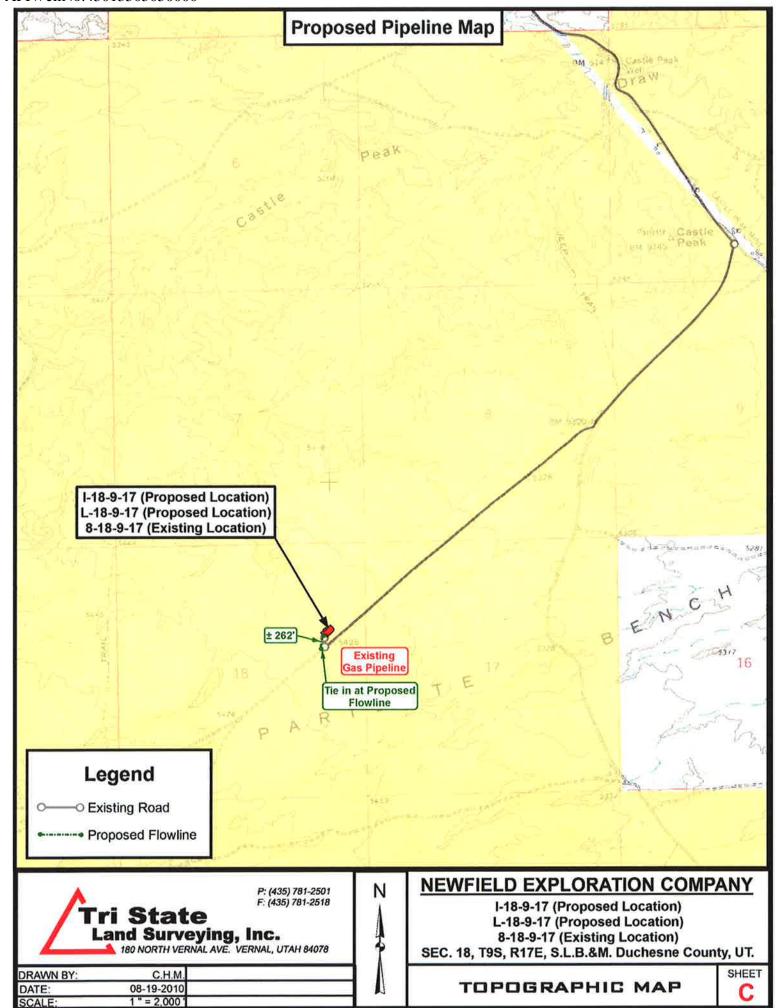
#### TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

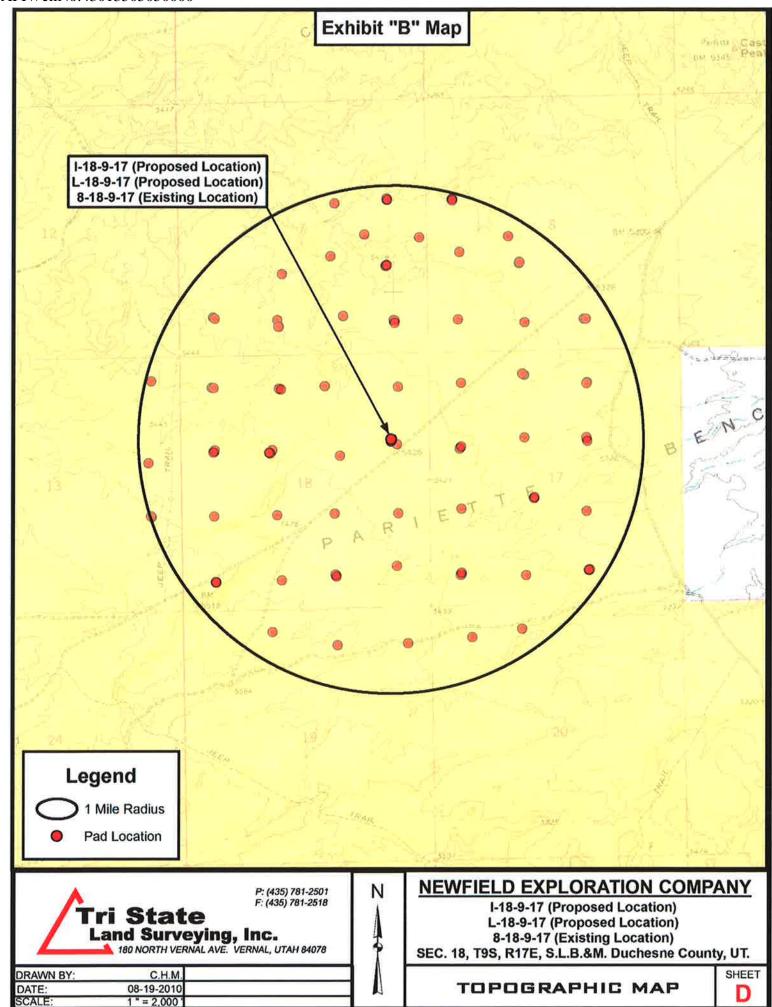
DATE SURVEYED: 08-09-10	SURVEYED BY: D.G.
DATE DRAWN: 09-20-10	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'







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# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 18 T9S R17E I-18-9-17

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

13 September, 2010





#### **HATHAWAY BURNHAM**

Planning Report



Database: Company: Project: Site:

Well:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

**SECTION 18 T9S R17E** 

I-18-9-17 Wellbore: Wellbore #1 Design #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well I-18-9-17

I-18-9-17 @ 5439.0ft (Original Well Elev) I-18-9-17 @ 5439.0ft (Original Well Elev)

Grid

Minimum Curvature

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983

System Datum:

Mean Sea Level

Map Zone:

Utah Central Zone

SECTION 18 T9S R17E Site

Site Position: From: **Position Uncertainty:** 

Map

+N/-S

+E/-W

Northing: Easting: Slot Radius: 7,183,900.00ft 2,049,800.00ft

Latitude: Longitude:

**Grid Convergence:** 

40° 1' 56.921 N 110° 2' 16.332 W

0.94°

Well

I-18-9-17, SHL LAT: 40° 01' 59.42, LONG: -110° 02' 33.70

Well Position

230.8 ft -1,354.8 ft

0.0 ft

Northing: Easting:

7,184,130.78 ft 2,048,445.24 ft

Latitude: Longitude:

40° 1' 59.420 N 110° 2' 33,700 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5,439.0 ft

**Ground Level:** 

65.81

5,427.0 ft

Wellbore

Wellbore #1

**Magnetics** 

**Model Name IGRF2010** 

Sample Date 2010/09/13 Declination (°) 11.40 Dip Angle (°)

Field Strength (nT)

52,342

Design

Design #1

**Audit Notes:** Version:

Phase:

**PROTOTYPE** 

Tie On Depth:

0.0

**Vertical Section:** 

Depth From (TVD) (ft) 4,800.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°) 308.46

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,440.1	12.60	308.46	1,433.3	57.2	-72.0	1.50	1.50	0.00	308.46	
4,889.9	12.60	308.46	4,800.0	525.3	-661.4	0.00	0.00	0.00	0.00	I-18-9-17 TGT
6,068.2	12.60	308.46	5,950.0	685.2	-862.7	0.00	0.00	0.00	0.00	



#### **HATHAWAY BURNHAM**

**Planning Report** 



Database: Company: Project: Site: Well:

Wellbore:

Design:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT) SECTION 18 T9S R17E

I-18-9-17 Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well I-18-9-17

I-18-9-17 @ 5439.0ft (Original Well Elev) I-18-9-17 @ 5439.0ft (Original Well Elev)

Grid

Minimum Curvature

esign:	Design #1								
lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	308.46	700.0	0.8	-1.0	1.3	1.50	1.50	0.00
800.0	3.00	308.46	799.9	3.3	-4.1	5.2	1.50	1.50	0.00
900.0	4.50	308.46	899.7	7.3	-9.2	11.8	1.50	1.50	0.00
1,000.0	6.00	308.46	999.3	13.0	-16.4	20.9	1.50	1.50	0.00
1,100.0	7.50	308.46	1,098.6	20.3	-25.6	32.7	1.50	1.50	0.00
1,200.0	9.00	308.46	1,197.5	29.2	-25.6 -36.8	47.0	1.50	1.50	0.00
1,300.0	10.50	308.46	1,296.1	39.8	-50.0	64.0	1.50	1.50	0.00
1,400.0	12.00	308.46	1,394.2	51.9	-65.4	83.5	1.50	1.50	0.00
Ī									
1,440.1	12.60	308.46	1,433,3	57.2	-72.0	92.0	1.50	1.50	0.00
1,500.0	12.60	308.46	1,491.8	65.4	-82.3	105.1	0.00	0.00	0.00
1,600.0	12.60	308.46	1,589.4	78.9	-99.4	126.9	0.00	0.00	0.00
1,700.0 1,800.0	12.60 12.60	308.46 308.46	1,687.0 1,784.6	92.5 106.1	-116.4 -133.5	148.7 170.5	0.00 0.00	0.00 0.00	0.00 0.00
1,900.0	12.60	308.46	1,882.2	119.6	-150.6	192.3	0,00	0.00	0.00
2,000.0	12.60	308.46	1,979.8	133.2	-167.7	214.2	0.00	0.00	0.00
2,100.0	12.60	308.46	2,077.3	146.8	-184.8	236.0	0.00	0.00	0.00
2,200.0	12.60	308.46	2,174.9	160.3	-201.9	257.8	0.00	0.00	0.00
2,300.0	12.60	308.46	2,272.5	173.9	-218.9	279.6	0.00	0.00	0.00
2,400.0	12.60	308.46	2,370.1	187.5	-236.0	301.4	0.00	0.00	0.00
2,500.0	12.60	308.46	2,467.7	201.0	-253.1	323.2	0.00	0.00	0.00
2,600.0	12.60	308.46	2,565.3	214.6	-270.2	345.1	0.00	0.00	0.00
2,700.0	12.60	308.46	2,662.9	228.2	-287.3	366.9	0.00	0.00	0.00
2,800.0	12.60	308.46	2,760.5	241.8	-304.4	388.7	0.00	0.00	0.00
2,900.0	12.60	308.46	2,858.1	255.3	-321.4	410.5	0.00	0.00	0.00
3,000.0	12.60	308.46	2,955.7	268.9	-338.5	432.3	0.00	0.00	0.00
3,100.0	12.60	308.46	3,053.3	282.5	-355.6	454.1	0.00	0.00	0.00
3,200.0	12.60	308.46	3,150.9	296.0	-372.7	476.0	0.00	0.00	0.00
3,300.0	12.60	308.46	3,248.4	309.6	-389.8	497.8	0.00	0.00	0.00
3,400.0	12.60	308.46	3,346.0	323.2	-406.9	519.6	0.00	0.00	0.00
3,500.0	12.60	308.46	3,443.6	336.7	-423.9	541.4	0.00	0.00	0.00
3,600.0	12.60	308.46	3,541.2	350.3	-441.0	563.2	0.00	0.00	0.00
3,700.0	12.60	308.46	3,638.8	363.9	-458.1	585.0	0.00	0.00	0.00
3,800.0	12.60	308.46	3,736.4	377.4	-475.2	606.9	0.00	0.00	0.00
3,900.0	12.60	308.46	3,834.0	391.0	-492.3	628.7	0.00	0.00	0.00
4,000.0	12.60	308.46	3,931.6	404.6	-509.4	650.5	0.00	0.00	0.00
4,100.0	12.60	308.46	4,029.2	418.2	-526.4	672.3	0.00	0.00	0.00
4,200.0	12.60	308.46	4,126.8	431.7	-543.5	694.1	0.00	0.00	0.00
4,300.0	12.60	308.46	4,224.4	445.3	-560.6	715.9	0.00	0.00	0.00
4,400.0	12.60	308.46	4,321.9	458.9	-577.7	737.8	0.00	0.00	0.00
4,500.0	12.60	308.46	4,321.9 4,419.5	456.9 472.4	-577.7 -594.8	757.6 759.6	0.00	0.00	0.00
4,600.0	12.60	308.46	4,517.1	486.0	-594.6 -611.9	781.4	0.00	0.00	0.00
4,700.0	12.60	308.46	4,614.7	499.6	-628.9	803.2	0.00	0.00	0.00
4,800.0	12.60	308.46	4,712.3	513.1	-646.0	825.0	0.00	0.00	0.00
4,889.9	12.60	308.46	4,800.0	525.3	-661.4	844.6	0.00	0.00	0.00
I-18-9-17 TO		200.40	4 000 0	E00 7	600.4	0.40.0	0.00	0.00	0.00
4,900.0	12.60	308.46	4,809.9	526.7	-663.1	846.8	0.00	0.00	0.00
5,000.0	12.60	308.46	4,907.5	540.3	-680.2	868.7	0.00	0.00	0.00



#### **HATHAWAY BURNHAM**

**Planning Report** 



Database: Company: Project: Site:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

SECTION 18 T9S R17E

Well: Wellbore: Design:

I-18-9**-**17 Wellbore #1 Design #1

Local Co-ordinate Reference:

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well I-18-9-17

I-18-9-17 @ 5439.0ft (Original Well Elev) I-18-9-17 @ 5439.0ft (Original Well Elev)

Minimum Curvature

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,100.0	12.60	308.46	5,005.1	553.8	-697.3	890.5	0.00	0.00	0.00
5,200.0	12.60	308.46	5,102.7	567.4	-714.4	912.3	0.00	0.00	0.00
5,300.0	12.60	308.46	5,200.3	581.0	-731.4	934.1	0.00	0.00	0.00
5,400.0	12.60	308.46	5,297.9	594.6	-748.5	955.9	0.00	0.00	0.00
5,500.0	12.60	308.46	5,395.4	608.1	-765.6	977.7	0.00	0.00	0.00
5,600.0	12.60	308.46	5,493.0	621.7	-782.7	999.6	0.00	0.00	0.00
5,700.0	12.60	308.46	5,590.6	635.3	-799.8	1,021.4	0.00	0.00	0.00
5,800.0	12.60	308.46	5,688.2	648.8	-816.9	1,043.2	0.00	0.00	0.00
5,900.0	12.60	308.46	5,785.8	662.4	-833.9	1,065.0	0.00	0.00	0.00
6,000.0	12.60	308.46	5,883.4	676.0	-851.0	1,086.8	0.00	0.00	0.00
6,068.2	12.60	308.46	5,950.0	685.2	-862.7	1,101.7	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
I-18-9-17 TGT - plan hits target - Circle (radius 75	0.00 5.0)	0.00	4,800.0	525.3	-661.4	7,184,656.11	2,047,783.86	40° 2' 4.718 N	110° 2' 42.092 W



Project: USGS Myton SW (UT) Site: SECTION 18 T9S R17E

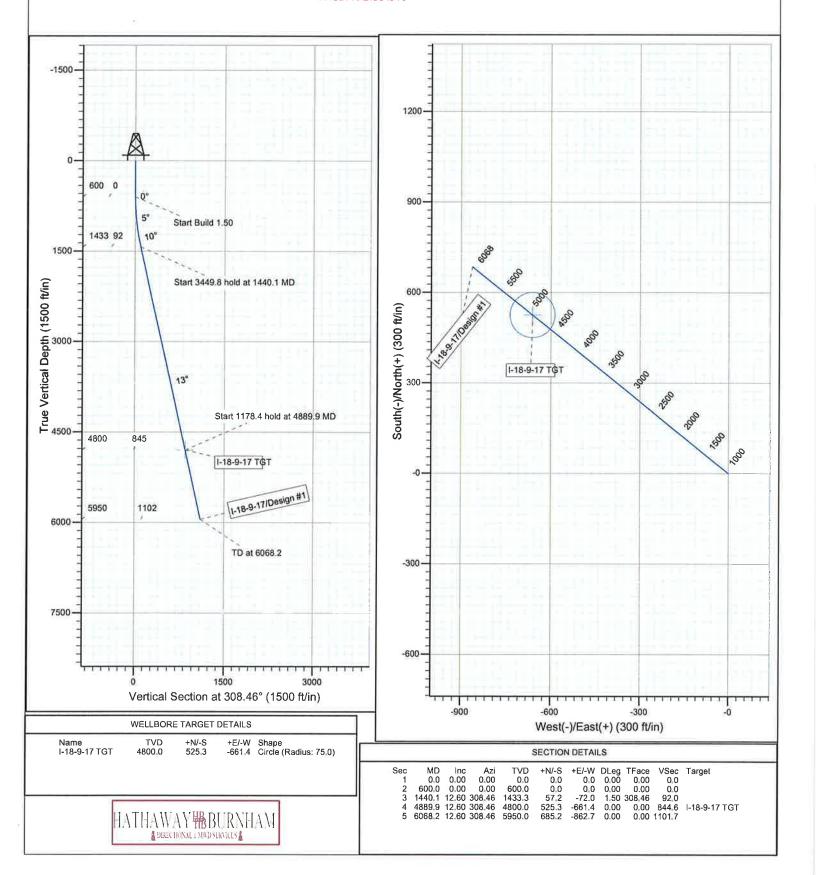
Well: I-18-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to Grid North True North: -0.93° Magnetic North: 10.46°

Magnetic Field Strength: 52341.9snT Dip Angle: 65.81° Date: 2010/09/13 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1,5 DEG/100 TARGET RADIUS IS 75'



## NEWFIELD PRODUCTION COMPANY GREATER MONUMENT BUTTE I-18-9-17 AT SURFACE: SE/NE SECTION 18, T9S, R17E DUCHESNE COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Greater Monument Butte I-18-9-17 located in the SE 1/4 NE 1/4 Section 18, T9S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly -11.3 miles  $\pm$  to it's junction with an existing road to the southwest; proceed southwesterly -2.3 miles  $\pm$  to it's junction with an existing road to the north; proceed northerly -226'  $\pm$  to the existing 8-18-9-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 8-18-9-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

#### 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

#### 4. <u>LOCATION OF EXISTING AND/OR PROPOSED FACILITIES</u>

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond

Water Right: 43-11787

Newfield Collector Well

Water Right: 41-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

#### Fencing Requirements

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

#### b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

#### 11. <u>SURFACE OWNERSHIP</u> – Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #10-216, 11/1/10. Paleontological Resource Survey prepared by, Wade E. Miller, 10/22/10. See attached report cover pages, Exhibit "D".

#### Surface Flow Line

Newfield requests 262' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "D"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

<u>Clearing and Grading</u>: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

<u>Installation:</u> The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

<u>Termination and Final Reclamation:</u> After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed Greater Monument Butte I-18-9-17 was on-sited on 10/6/10. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), and Janna Simonsen (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Greater Monument Butte I-18-9-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Greater Monument Butte I-18-9-17,

Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:

#### Representative

Name:

Tim Eaton

Address:

Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone:

(435) 646-3721

#### Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #I-18-9-17, Section 18, Township 9S, Range 17E: Lease UTU-72106 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

<u>11/24/10</u> Date

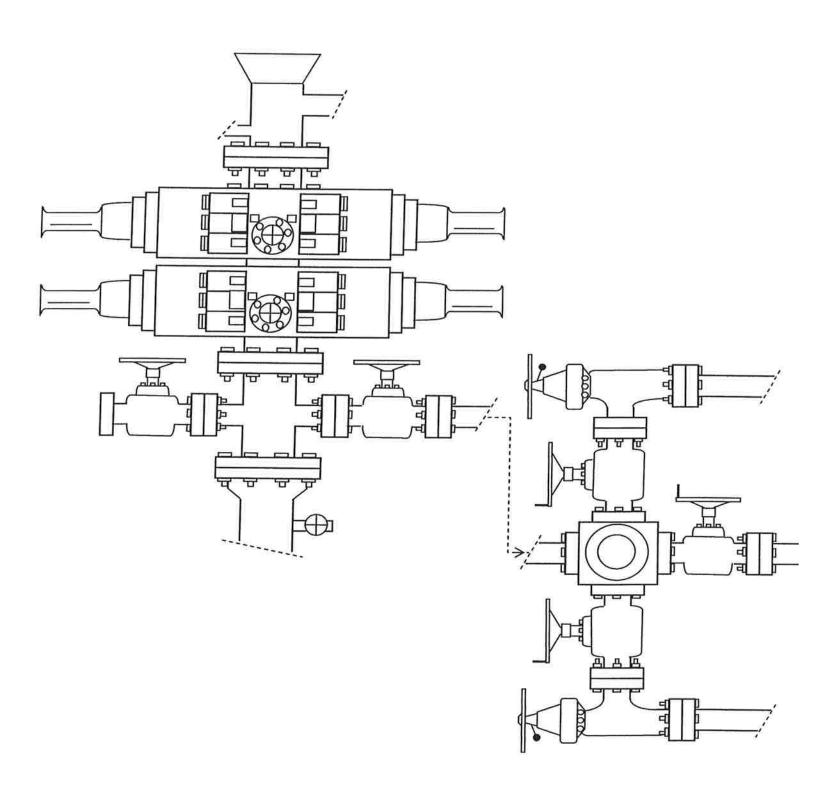
Mandié Crozier Regulatory Specialist

Newfield Production Company

Mandi Cio

## 2-M SYSTEM

Blowout Prevention Equipment Systems



**EXHIBIT C** 



November 29, 2010

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

Greater Monument Butte I-18-9-17
Greater Monument Butte (Green River) Unit

Surface Hole:

T9S-R17E Section 18: SENE (UTU-72106)

1808' FNL 790' FEL

At Target:

T9S-R17E Section 18: NWNE (UTU-3563)

1106' FNL 1638' FEL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 11/24/10, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

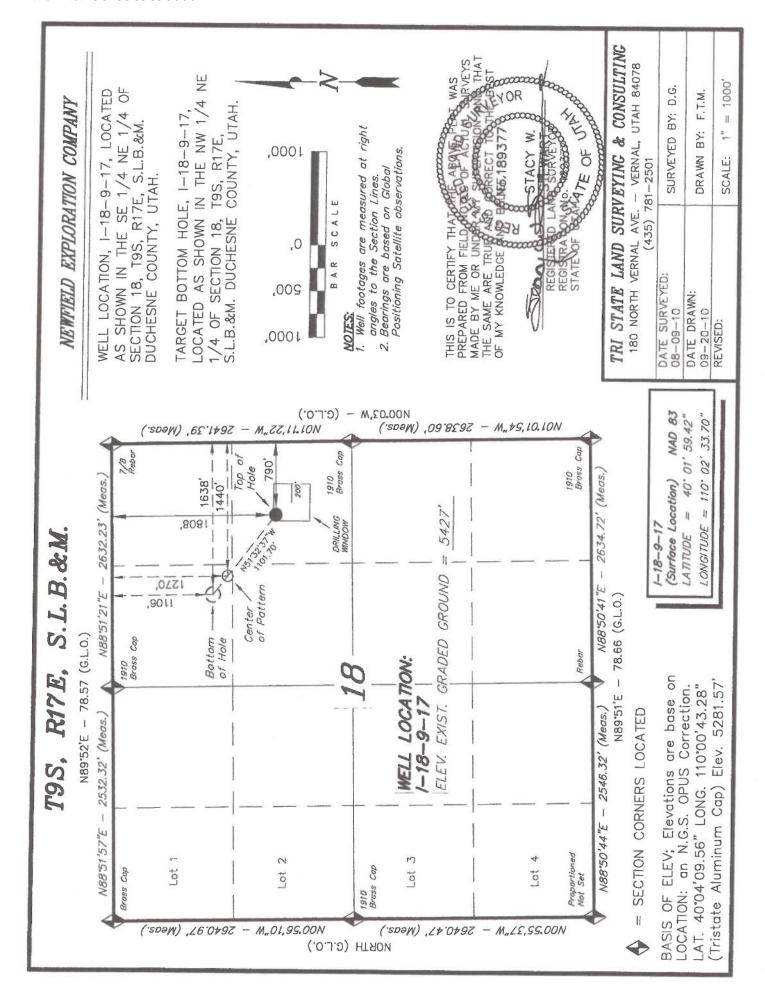
NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at sgillespie@newfield.com. Your consideration in this matter is greatly appreciated.

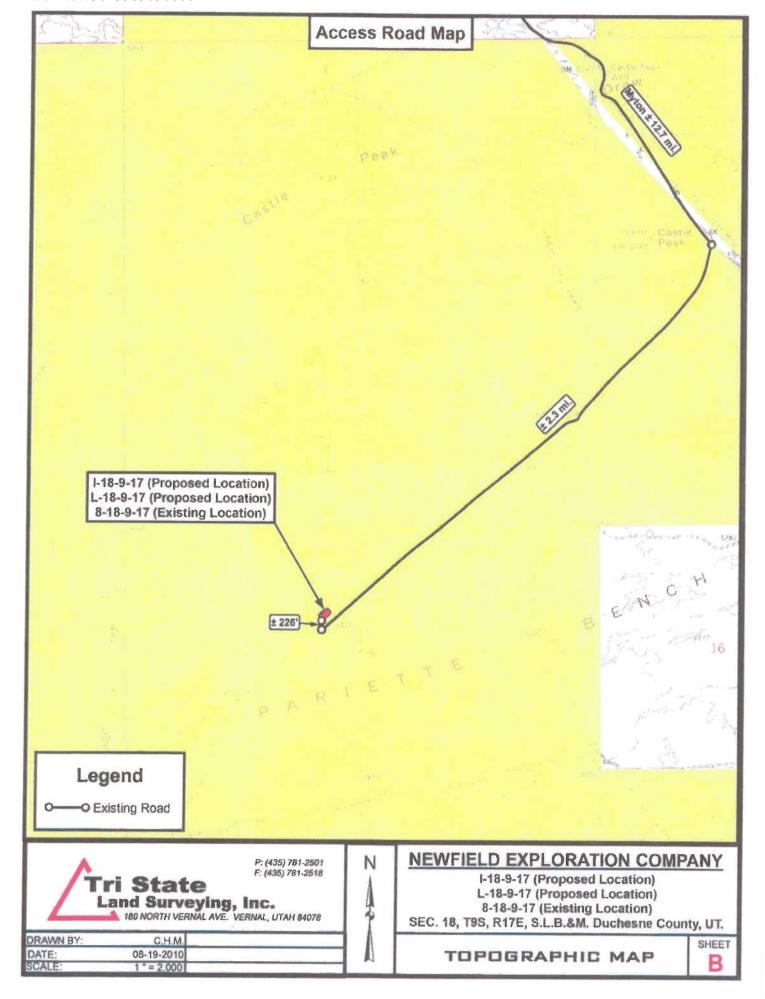
Sincerely,

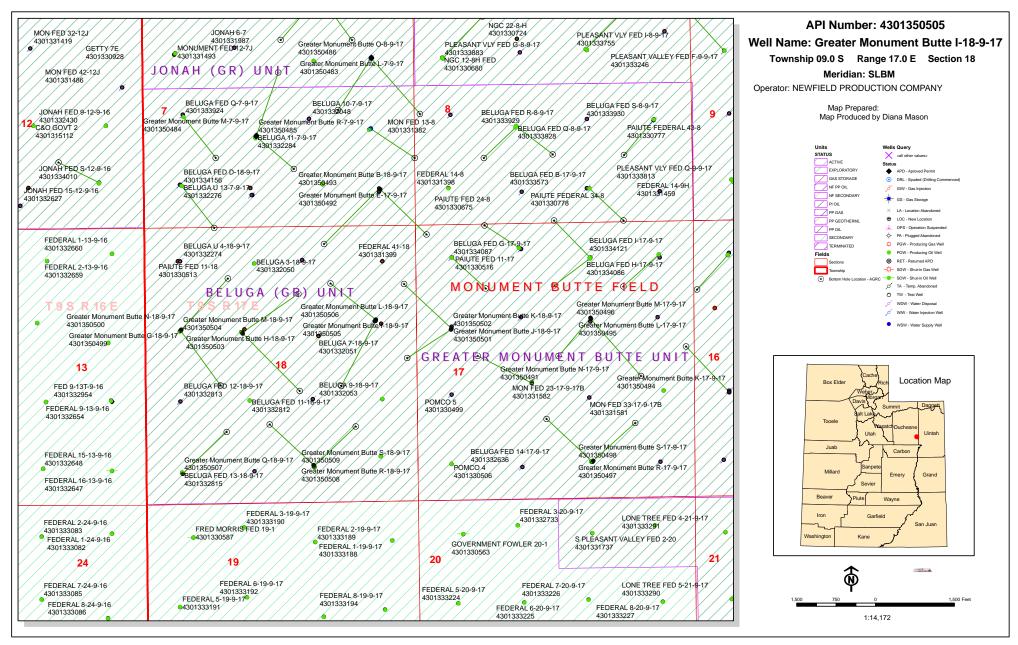
Newfield Production Company

Shane Gillespie Land Associate

Form 3160-3 (August 2007)		FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010  5. Lease Serial No. UTU-72106  6. If Indian, Allotee or Tribe Name NA			
UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MAI					
APPLICATION FOR PERMIT TO					
la. Type of work:	work:  DRILL  REENTER				
lb. Type of Well: Oil Well Gas Well Other	iple Zone	Lease Name and Well No.     Greater Monument Butte I-18-9-17			
Name of Operator Newfield Production Company	5	9. API Well No.			
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (include area code) (435) 646-3721	10	10. Field and Pool, or Exploratory  Monument Butte		
4. Location of Well (Report location clearly and in accordance with a At surface SE/NE 1808' FNL 790' FEL Sec. 18, T9 At proposed prod. zone NW/NE 1106' FNL 1638' FEL Sec.	11	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 18, T9S R17E			
14. Distance in miles and direction from nearest town or post office* Approximately 15.0 miles southeast of Myton, UT	1.	2. County or Parish Duchesne	13. State UT		
15 Distance from proposed* location to nearest property or lease line, fi. Approx. 214' f/lse, NA' f/unit (Also to nearest drig. unit line, if any)	16. No. of acres in lease 1,188.92		ng Unit dedicated to this well  20 Acres		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1003'	19 Proposed Depth 6,068'		BIA Bond No. on file NYB000493		
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 5427' GL	22 Approximate date work will sta		23. Estimated duration (7) days from SPUD to rig release		
	24. Attachments				
The following, completed in accordance with the requirements of Onshor  1. Well plat certified by a registered surveyor.  2. A Drilling Plan.  3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	4 Bond to cover t Item 20 above). Lands, the 5 Operator certific	he operations u	rm: nless covered by an exist ation and/or plans as may		
25. Signaturey karroli Crojus	Name (Printed Typed) Mandie Crozier		Date		
Title Regulatory Specialist					
Approved by (Signature)	Name (Printed/Typed)	- 0/0000	Date		
Trtle	Office				
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equitable title to those righ	ts in the subject	lease which would entitle	the applicant to	
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr. States any false, fictitious or fraudulent statements or representations as to	ime for any person knowingly and vo any matter within its jurisdiction.	villfully to make	to any department or age	ncy of the United	
(Continued on page 2)	*		*(Instructi	ons on page 2)	







## **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

November 30, 2010

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50491 GMBU N-17-9-17 Sec 17 T09S R17E 2204 FSL 2172 FWL BHL Sec 17 T09S R17E 2528 FNL 1145 FWL 43-013-50492 GMBU E-17-9-17 Sec 07 T09S R17E 0679 FSL 0676 FEL BHL Sec 17 T09S R17E 0200 FNL 0197 FWL 43-013-50493 GMBU B-18-9-17 Sec 07 T09S R17E 0690 FSL 0695 FEL BHL Sec 18 T09S R17E 0351 FNL 1758 FEL 43-013-50494 GMBU K-17-9-17 Sec 16 T09S R17E 1967 FSL 0652 FWL BHL Sec 17 T09S R17E 2402 FNL 0168 FEL 43-013-50495 GMBU L-17-9-17 Sec 17 T09S R17E 1856 FNL 1980 FEL BHL Sec 17 T09S R17E 2301 FSL 1028 FEL 43-013-50496 GMBU M-17-9-17 Sec 17 T09S R17E 1835 FNL 1981 FEL BHL Sec 17 T09S R17E 2553 FNL 2592 FEL

43-013-50497 GMBU R-17-9-17 Sec 17 T09S R17E 0684 FSL 1962 FEL BHL Sec 17 T09S R17E 1516 FSL 2447 FWL

43-013-50498 GMBU S-17-9-17 Sec 17 T09S R17E 0699 FSL 1947 FEL

BHL Sec 17 T09S R17E 1412 FSL 1143 FEL

Page 2

API#	WELL NAME	LOCATION						
(Proposed PZ	GREEN RIVER)							
43-013-50499	GMBU G-18-9-17 BI	Sec HL Sec						
43-013-50500	GMBU N-18-9-17 BI	Sec HL Sec						
43-013-50501	GMBU J-18-9-17 BI	Sec HL Sec						
43-013-50502	GMBU K-18-9-17 BI	Sec HL Sec						
43-013-50503	GMBU H-18-9-17 BI	Sec HL Sec						
43-013-50504	GMBU M-18-9-17 BI	Sec HL Sec						
43-013-50505	GMBU I-18-9-17 BI	Sec HL Sec						
43-013-50506	GMBU L-18-9-17 BI	Sec HL Sec						
43-013-50507	GMBU Q-18-9-17 BI	Sec HL Sec						
43-013-50508	GMBU R-18-9-17 BH	Sec HL Sec						
43-013-50509	GMBU S-18-9-17 BH	Sec HL Sec						

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L Coulthard

DN: cn=Michael L Coulthard, o=Bureau of Land Management, ou=Branch of Minerals
email=Michael\_Coulthard@blm.gov, c=US

Date: 2010.11.30 09:30:01-0700"

bcc: File - Greater Monument Butte Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:11-30-10



Project: USGS Myton SW (UT) Site: SECTION 17 T9S, R17E

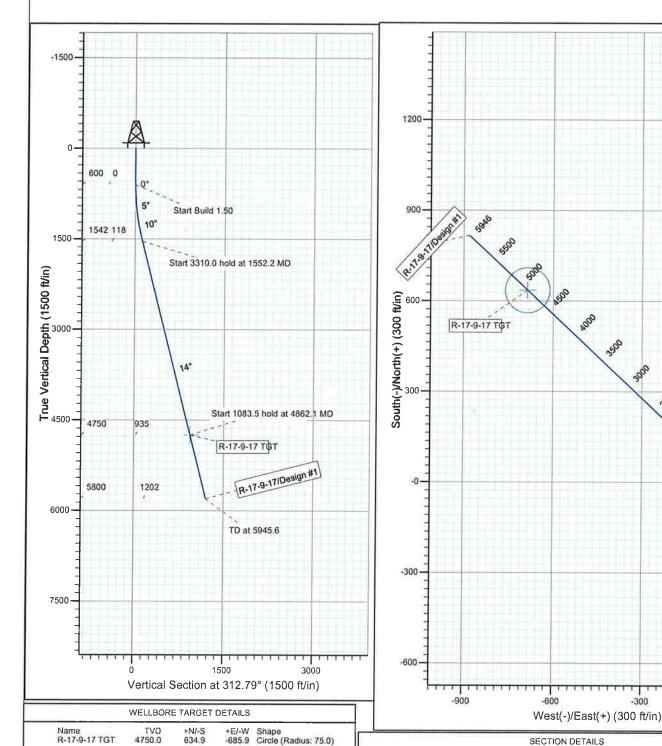
Well: R-17-9-17 Wellbore: Wellbore #1 Design: Design #1

Azimuths to True North Magnetic North: 11.39°

Magnetic Field Strength: 52341.8snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010

1500

KOP @ 600' DOGLEG RATE 1.5 DEG/100 **TARGET RADIUS IS 75'** 



SECTION DETAILS

MD Inc Azi 0.0 0.00 0.00 600.0 0.00 0.00 1552.2 14.28 312.79 4862.1 14.28 312.79 +E/-W DLeg TFace 0.0 0.00 0.00 0.0 0.00 0.00 -86.6 1.50 312.79 -685.9 0.00 0.00 VSec 0.0 0.0 118.1 934.7 TVD 0.0 0.0 600.0 1542.4 0.0 80.2 634.9 R-17-9-17 TGT 5945,6 14,28 312.79 0.00 1202.0 5800.0 816.5 -882.1 0.00





Project: USGS Myton SW (UT) Site: SECTION 17 T9S, R17E

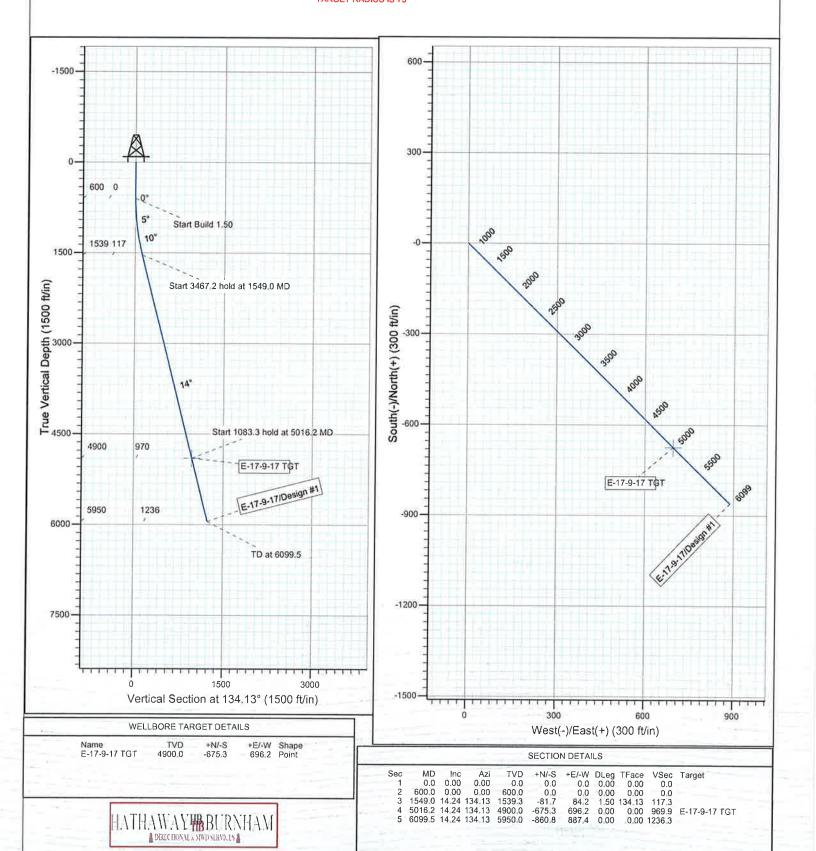
Well: E-17-9-17 Wellbore: Wellbore #1 Design: Design #1

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



Azimuths to True North Magnetic North: 11.40°

Magnetic Field Strength: 52346.0snT Dip Angle: 65.81° Date: 2010/09/13 Model: IGRF2010





Project: USGS Myton SW (UT) Site: SECTION 18 T9S R17E

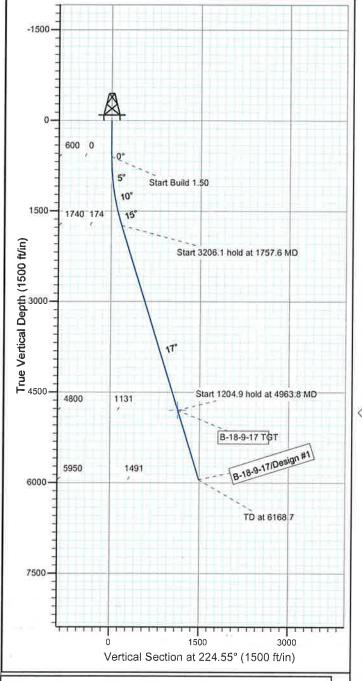
Well: B-18-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to Grid North True North: -0.93° Magnetic North: 10.47°

Magnetic Field Strength: 52346.0snT Dip Angle: 65.81° Date: 2010/09/13 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'





Name B-18-9-17 TGT TVD 4800.0 +N/-S -805.9 +E/-W Shape -793.4 Circle (Radius: 75.0)

> MD Inc Azi 0.0 0.00 0.00 600.0 0.00 0.00 1757.6 17.36 224.55 4963.8 17.36 224.55

6168 7 17 36 224 55

0.0 600.0 1740.0 4800.0

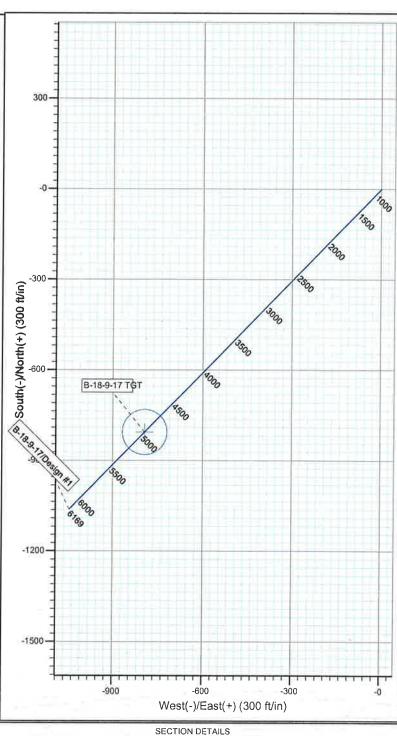
0.0

-122.1 -793.4

-124.1 -805.9

5950.0 -1062.2 -1045.7





+E/-W -DLeg TFace 0.0 0.00 0.00 0.0 0.00 0.00

0.00

1 50 224.55 174 1 0 00 0 00 1130 9

0.00 1490.5

VSec

0.0

B-18-9-17 TGT



Project: USGS Myton SW (UT) Site: SECTION 16 T9S, R17E

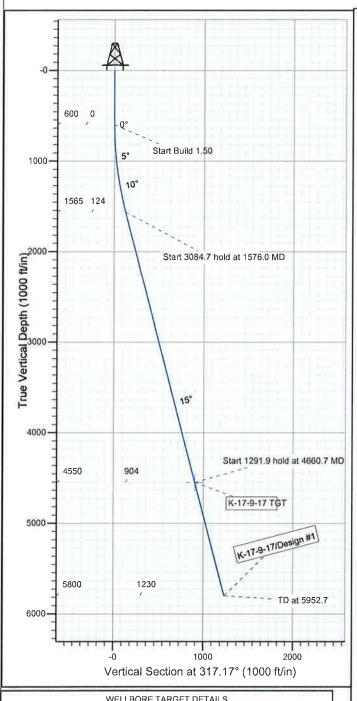
Well: K-17-9-17 Wellbore: Wellbore #1 Design: Design #1

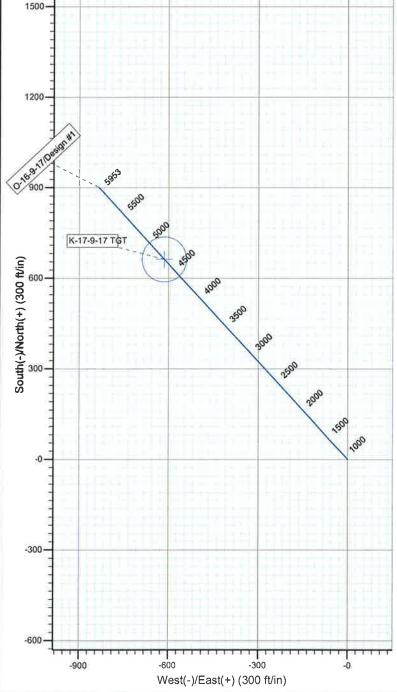
KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



Azimuths to True North Magnetic North: 11.37°

Magnetic Field Strength: 52326.4snT Dip Angle: 65.81° Date: 2010/11/17 Model: IGRF2010





SECTION DETAILS

-614,3 -836,3

+N/-S 0.0 0.0 91.0 662.7 902.2

MD 0.0 Inc 0.00

600.0 0.00 0.00 1576.0 14.64 317.17 4660.7 14.64 317.17

5952.7 14.64 317.17 5800.0

Azi 0.00

TVD 0.0

600.0 1565.4

+E/-W DLeg TFace 0.0 0.00 0.00 0.0 0.00 0.00 -84.3 1.50 317.17

0.00

0.00

0.00 0.0 0.00 0.0 17.17 124.0 0.00 903.7 0.00 1230.2

K-17-9-17 TGT

WELLBORE TARGET DETAILS

TVD 4550,0 Name K-17-9-17 TGT +N/-S 662.7 +E/-W Shape -614.3 Circle (Radius: 75.0)



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Project: USGS Myton SW (UT)

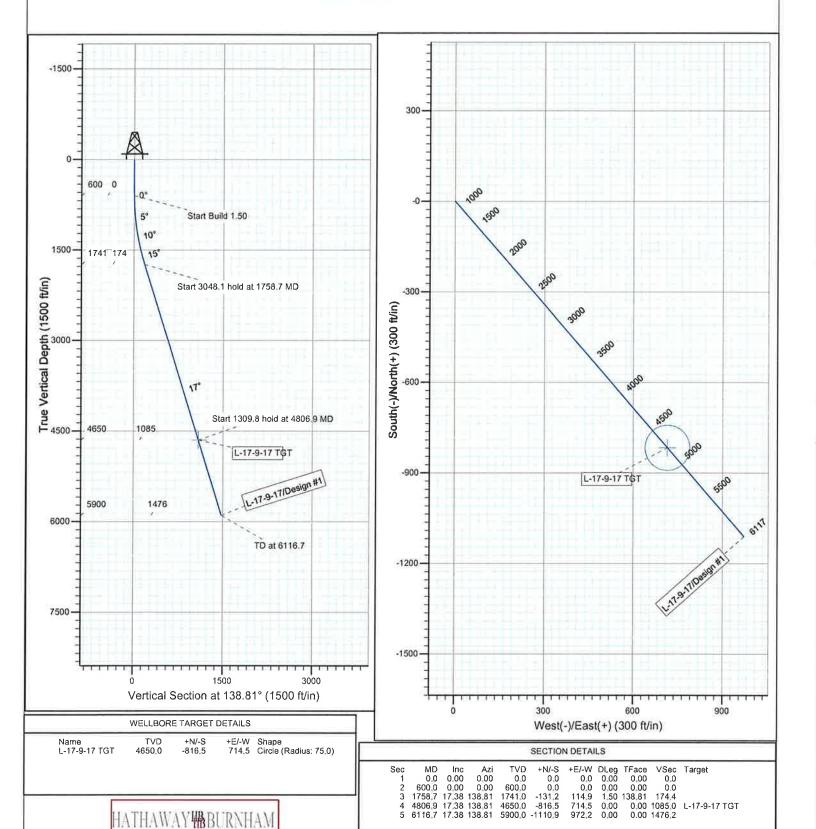
Site: SECTION 9 Well: L-17-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.40°

Magnetic Field Strength: 52347.9snT Dip Angle: 65.81° Date: 2010/08/31 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'





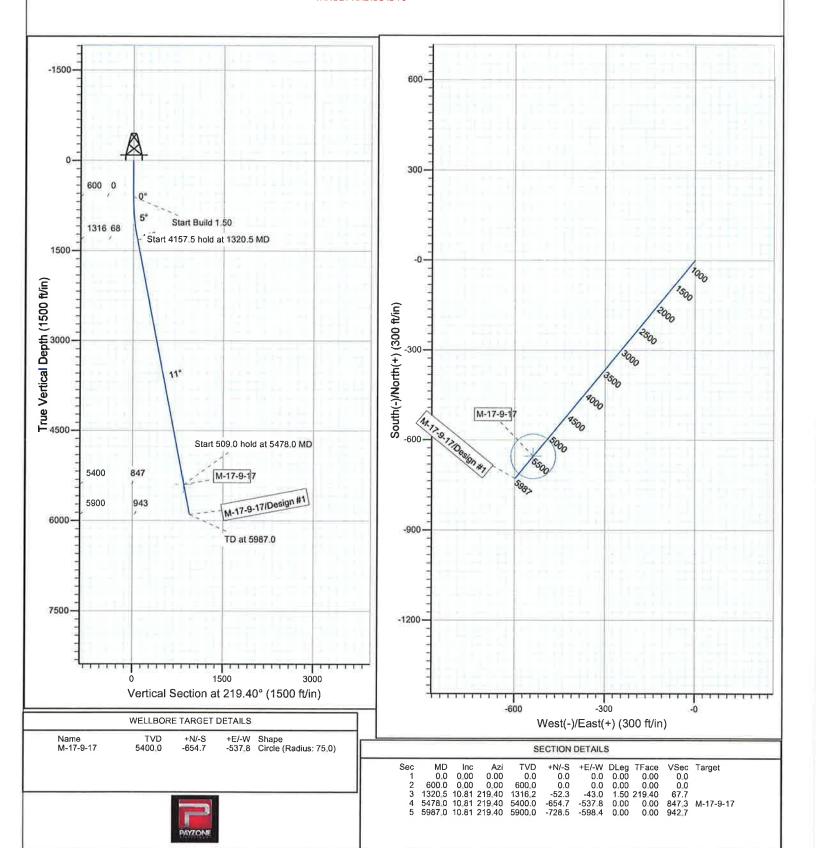
Well: M-17-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.39°

Magnetic Field Strength: 52340.6snT Dip Angle: 65.81° Date: 2010/09/27 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'





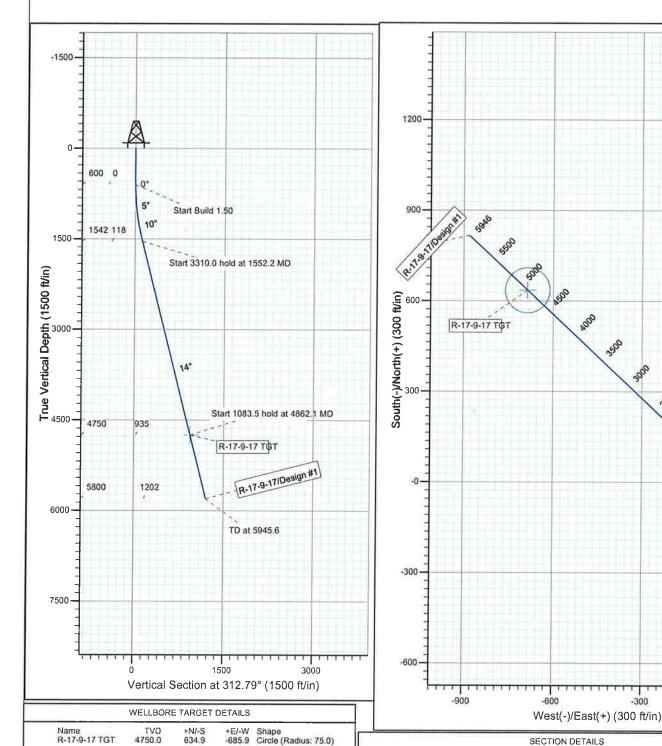
Well: R-17-9-17 Wellbore: Wellbore #1 Design: Design #1

Azimuths to True North Magnetic North: 11.39°

Magnetic Field Strength: 52341.8snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010

1500

KOP @ 600' DOGLEG RATE 1.5 DEG/100 **TARGET RADIUS IS 75'** 



SECTION DETAILS

MD Inc Azi 0.0 0.00 0.00 600.0 0.00 0.00 1552.2 14.28 312.79 4862.1 14.28 312.79 +E/-W DLeg TFace 0.0 0.00 0.00 0.0 0.00 0.00 -86.6 1.50 312.79 -685.9 0.00 0.00 VSec 0.0 0.0 118.1 934.7 TVD 0.0 0.0 600.0 1542.4 0.0 80.2 634.9 R-17-9-17 TGT 5945,6 14,28 312.79 0.00 1202.0 5800.0 816.5 -882.1 0.00





Well: S-17-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.39°

Magnetic Field Strength: 52341.9snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010

900

566.3 725.9

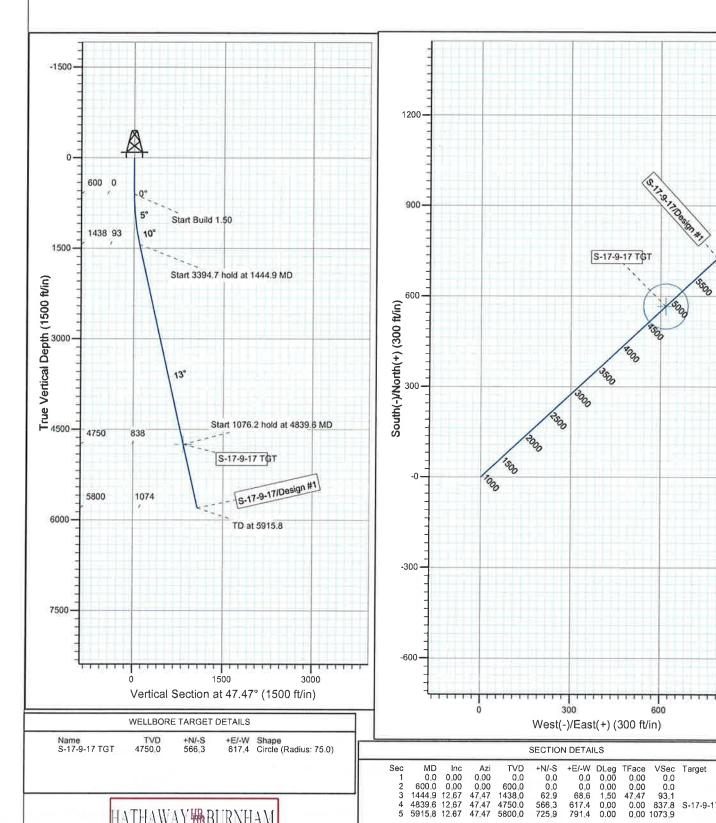
47.47

5800.0

0.00 837.8 0.00 1073.9

S-17-9-17 TGT

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



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DRECTIONAL & MWD SERVELS



Well: G-18-9-17 Wellbore: Wellbore #1

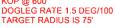
Design: Design #1

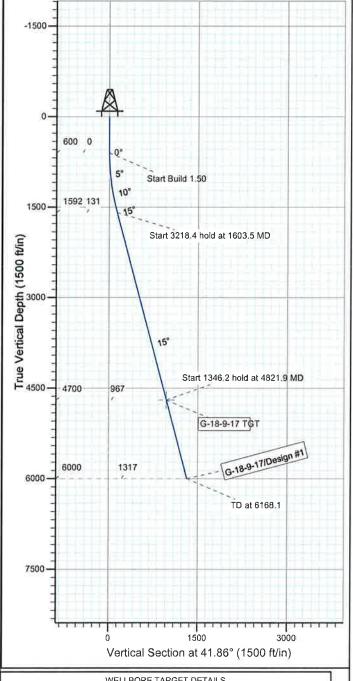
KOP @ 600' DOGLEG RATE 1.5 DEG/100



Azimuths to Grid North True North: -0.92° Magnetic North: 10.48°

Magnetic Field Strength: 52341.1snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010





WELLBORE TARGET DETAILS

TVD 4700.0 Name G-18-9-17 TGT +N/-S 720.2

+E/-W Shape 645,3 Circle (Radius: 75,0)

HATHAWAY BURNHAM DIRECTIONNE A MYD SERVICES A

1500	
1200	G. Id. 9. T. T. Dengar At 1
900	70700
South(-)/North(+) (300 fVin)	\$500 \$500 \$500 \$500 \$500 \$500 \$500 \$500
-300	
	6 300 600 900 West(-)/East(+) (300 ft/in)
	SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	_
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0,00	0.0		
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0		
3	1603.5	15.05	41.86	1592.0	97.6	87.5	1.50	41.86	131.1		
4	4821.9	15.05	41.86	4700.0	720.2	645.3	0.00	0.00	966.9	G-18-9-17 TGT	
5	6168_1	15.05	41.86	6000.0	980,5	878.6	0.00	0.00	1316.6		



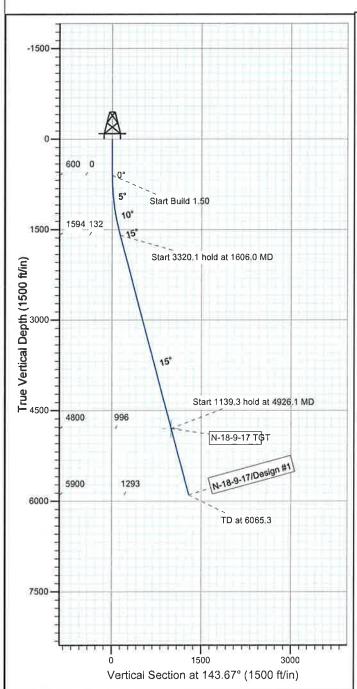
Well: N-18-9-17 Wellbore: Wellbore #1 Design: Design #1

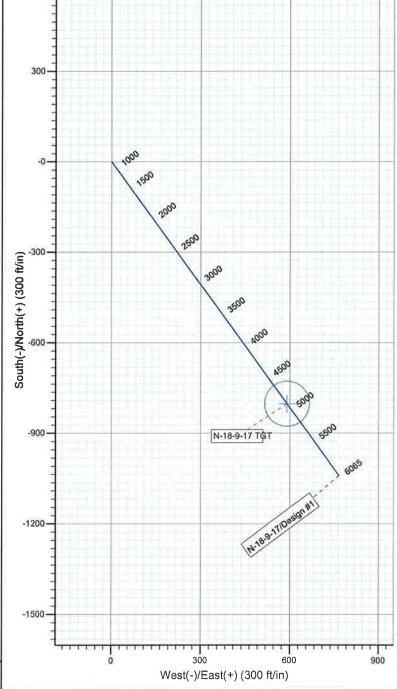
KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



Azimuths to Grid North True North: -0.92° Magnetic North: 10.48°

Magnetic Field Strength: 52341.1snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010





WELLBORE TARGET DETAILS

Name TVD +N/-S +E/-W Shape N-18-9-17 TGT 4800,0 -802.4 590.1 Circle (Radius: 75,0)



MD Inc Azi 0.0 0.00 0.00 600.0 0.00 0.00 1606.0 15.09 143.67 4926.1 15.09 143.67 6065.3 15.09 143.67 +E/-W DLeg 0.0 0.00 0.0 0.00 TFace VSec 0.0 0.0 131.7 996.0 0.0 600<sub>.</sub>0 0.0 0.00 1.50 143.67 0.00 0.00 1594.4 4800.0 -106.1 -802.4 78.0 590.1 0.00 996.0 0.00 1292.6 N-18-9-17 TGT 5900.0 -1041.3 765.8 0,00

SECTION DETAILS



6052

J-18-9-17 TGT

Well: J-18-9-17 Wellbore: Wellbore #1 Design: Design #1

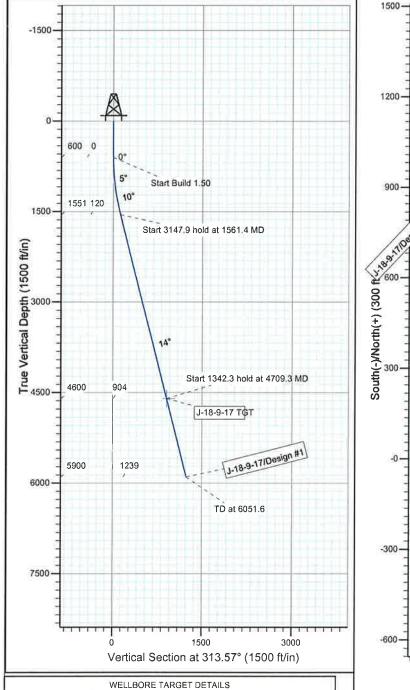
G

3500

Azimuths to Grid North True North: -0.94° Magnetic North: 10.46°

Magnetic Field Strength: 52344.1snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75



-0 -300 -600 -900 -600 -300 West(-)/East(+) (300 ft/in) SECTION DETAILS

Name J-18-9-17 TGT

4600.0

+N/-S 623.3

+E/-W Shape -655.2 Circle (Radius: 57.0)

HATHAWAY₩BURNHAM DIRECTIONAL & MWD SERVICES

+E/-W DLeg 0.0 0.00 0.0 0.00 -87.2 1.50 3 -655.2 0.00 -897.4 0.00 VSec 0.0 0.0 120.4 904.3 TFace 0.00 0.00 MD 0.0 Inc 0,00 Azi 0.00 TVD 0.0 +N/-S 0.0 0.0 83.0 623.3 853.7 600.0 0.00 0.00 1561.4 14.42 313.57 4709.3 14.42 313.57 600.0 1551.3 4600.0 1.50 313.57 0.00 0.00 J-18-9-17 TGT 6051.6 14.42 313.57 5900.0 0.00 1238.6



Well: K-18-9-17 Wellbore: Wellbore #1 Design: Design #1

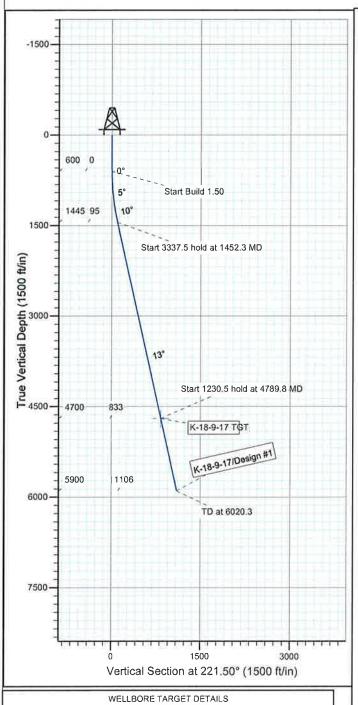
KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



Azimuths to Grid North True North: -0.94° Magnetic North: 10.46°

Magnetic Field Strength: 52344.1snT Dip Angle: 65.81° Date: 2010/09/07

Model: IGRF2010



600 300 Soy 74(-)/North(+) (300 fu'in) K-18-9-17 TGT -900 -1200 -900 -300 -600 West(-)/East(+) (300 ft/in)

+E/-W Shape -552.1 Circle (Radius: 75.0) +N/-S TVD K-18-9-17 TGT 4700,0 -624.1

> HATHAWAY**B**BURNHAM # DERECTIONAL & MWD SERVICES #

+E/-W DLeg TFace 0.0 0.00 0.00 0.0 0.00 0.00 -62,8 1,50 221,50 -552,1 0.00 0.00 MD Inc Azi 0.0 0.00 0.00 600.0 0.00 0.00 1452.3 12.79 221.50 4789.8 12.79 221.50 6020.3 12.79 221.50 Target VSec 0.0 600.0 1445.3 4700.0 5900.0 0.0 0.0 0.0 94.7 -70.9 0.00 833.3 0.00 1105.6 K-18-9-17 TGT -624.1 -828.0 -732,6

SECTION DETAILS



Well: H-18-9-17

Wellbore: Wellbore #1 Design: Design #1

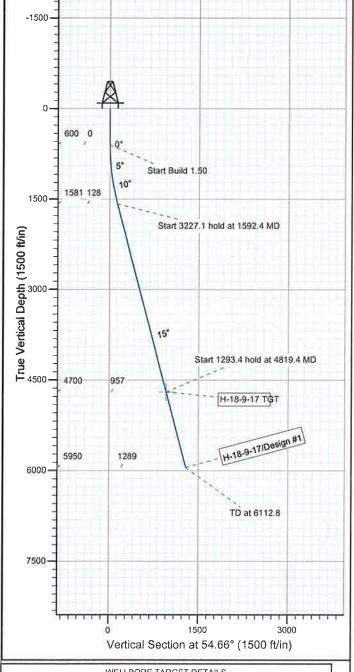
KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



Azimuths to Grid North True North: -0.93° Magnetic North: 10.48°

Magnetic Field Strength: 52341.7snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010







Name H-18-9-17 TGT

4700.0

553.7

+E/-W Shape 780.8 Circle (Radius: 75.0)

HATHAWAY #BURNHAM

1200				
900			H-18-9-17 T\$	H. Indept H. Indep H. Inde
South(-)/North(+) (300 ft/in)	13	Sans Sans	Association of the state of the	* State of the sta
-300	land w			
-600				
-	0	300 West(-)/	600 East(+) (300 ft/in)	900

SECTION DETAILS ec MD Inc 1 0.0 0.00 2 600.0 0.00 3 1592.4 14.89 4 4819.4 14.89 +E/-W DLeg 0.0 0.00 0.0 0.00 Azi 0.00 0.00 0.0 600.0 1581.2 4700.0 0.0 0.0 74.1 553.7 0,00 0.0 128.2 957.2 H-18-9-17 TGT 54.66 54.66 104.6 780.8 54,66 0.00 1.50 5950.0 745.8 1051.8 0.00 0.00 1289.4



Project: USGS Myton SW (UT)

Site: SECTION 18 T9S R17E

Well: M-18-9-17 Wellbore: Wellbore #1

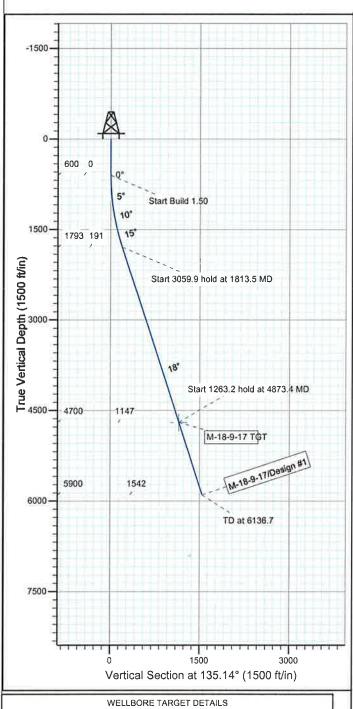
Design: Design #1

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75°



Azimuths to Grid North True North: -0.93° Magnetic North: 10.48°

Magnetic Field Strength: 52341.7snT Dip Angle: 65.81° Date: 2010/09/07 Model: IGRF2010



300 100 -300 South(-)/North(+) (300 ft/in) 3500 4000 5500 -900 M-18-9-17 TGT -1200-1500 300 900 West(-)/East(+) (300 ft/in)

+E/-W Shape 809.1 Circle (Radius: 75.0) Name M-18-9-17 TGT TVD 4700.0 +N/-S -813.0



VSec 0.0 0.0 191.2 0.00 0.00 MD 0.0 Inc 0.00 Azi 0.00 TVD 0,0 +N/-S 0.0 +E/-W DLeg 0.0 0.00 +E/-W 0.0 0.0 134.8 809.1 600.0 0.00 0.00 1813.5 18.20 135.14 4873.4 18.20 135.14 600.0 1793.2 0.0 -135.5 0.00 0.00 1.50 135.14 2 3 4 5 4700.0 M-18-9-17 TGT 6136.7 18.20 135.14 5900.0 -1092.8 1087.4 0.00 0.00 1541.6

SECTION DETAILS



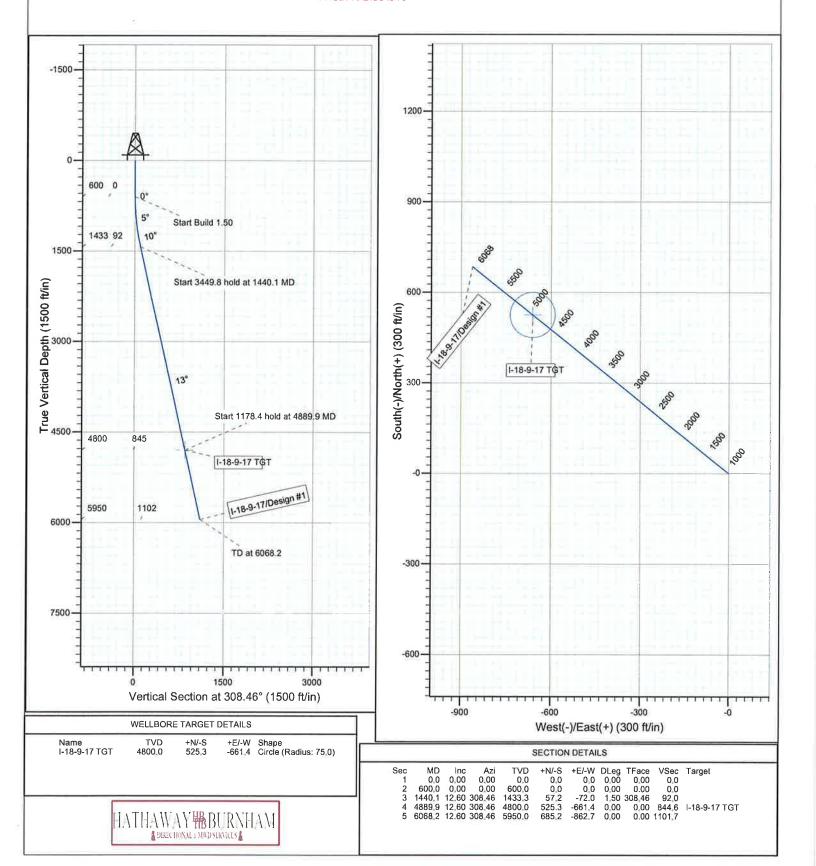
Well: I-18-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to Grid North True North: -0.93° Magnetic North: 10.46°

Magnetic Field Strength: 52341.9snT Dip Angle: 65.81° Date: 2010/09/13 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'





Well: L-18-9-17 Wellbore: Wellbore #1 Design: Design #1

0.0

-700.5

-135,6 -933,7

4800.0 -933.7 5900.0 -1215.3

4948 3 16 46 209 96 6095 3 16 46 209 96

0.00

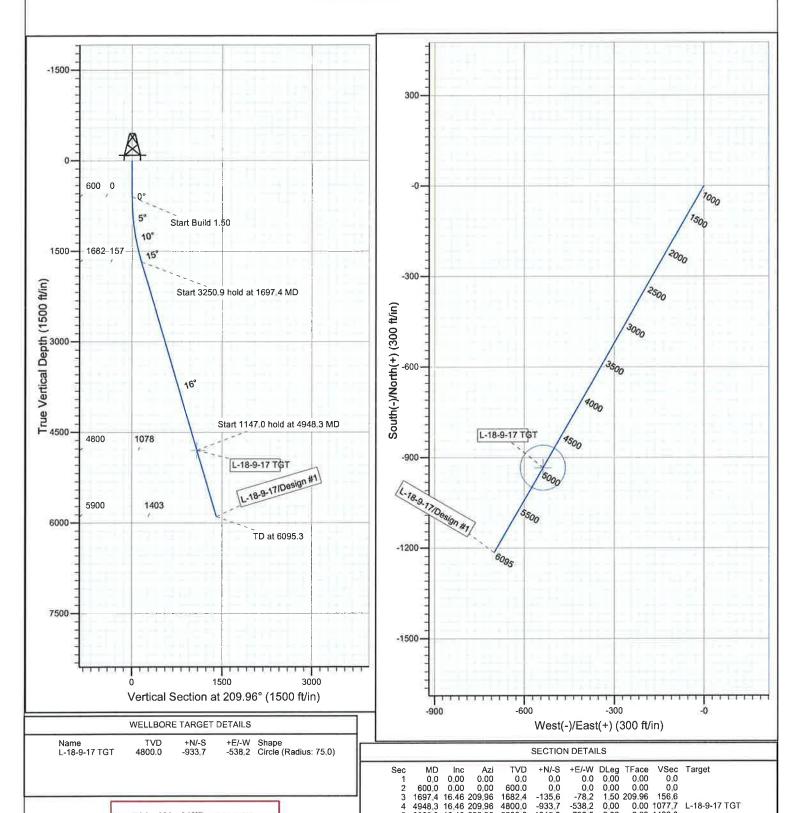
1 50 209.96 156.6 0.00 0.00 1077.7 0.00 0.00 1402.8

L-18-9-17 TGT

Azimuths to Grid North True North: -0.93° Magnetic North: 10.46°

Magnetic Field Strength: 52341.9snT Dip Angle: 65.81° Date: 2010/09/13 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



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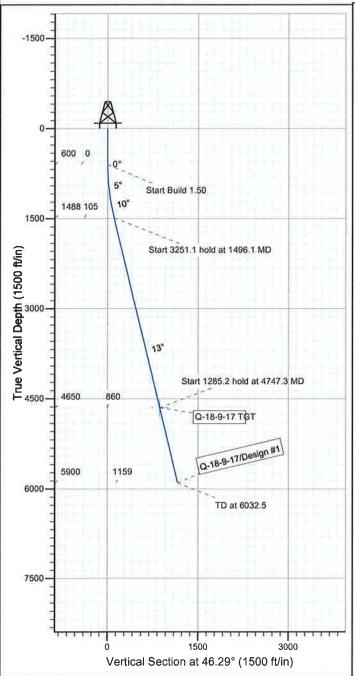
Well: Q-18-9-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to Grid North True North: -0.92° Magnetic North: 10.48°

Magnetic Field Strength: 52334.4snT Dip Angle: 65.80° Date: 2010/09/15 Model: IGRF2010

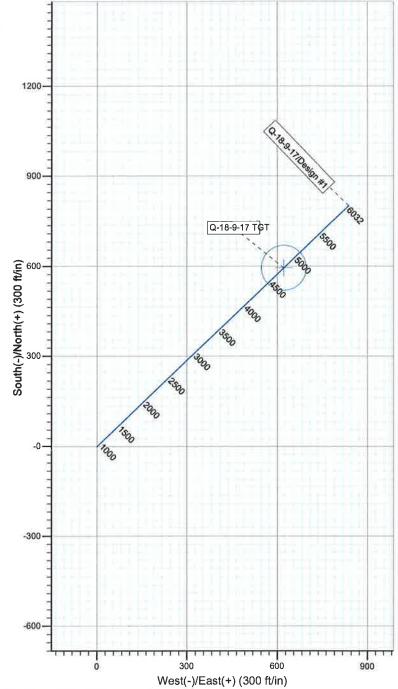
KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



 WELLBORE TARGET DETAILS

 Name Q-18-9-17 TGT
 TVD 4650.0
 +N/-S 594.5
 +E/-W 621.9
 Shape Circle (Radius: 75.0)

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											_
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0,00	0,0		
3	1496.1	13.44	46.29	1487.9	72.3	75.6	1.50	46.29	104.6		
4	4747.3	13.44	46.29	4650.0	594.5	621.9	0.00	0.00	860.4	Q-18-9-17 TGT	
5	6032,5	13.44	46.29	5900.0	801.0	837.9	0.00	0,00	1159,1		

SECTION DETAILS



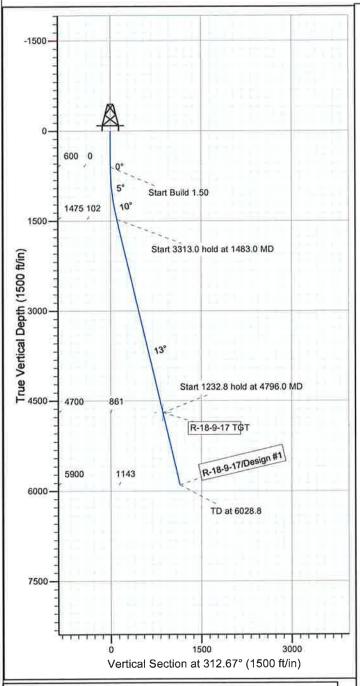
Well: R-18-9-17 Wellbore: Wellbore #1 Design: Design #1

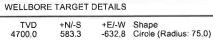


Azimuths to Grid North True North: -0.93° Magnetic North: 10.47°

Magnetic Field Strength: 52336.1snT Dip Angle: 65.80° Date: 2010/09/15 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'





HATHAWAY**M**BURNHAM A DIRECTIONAL A MWD SERVICES

583.3

4700,0

Name

R-18-9-17 TGT

1200-R. 18 9. Tilbase Hi 8029 4500 South(-)/North(+) (300 ft/in) R-18-9-17 TGT -0 -300 -600 -900 West(-)/East(+) (300 ft/in)

SECTION DETAILS										
4D	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	-	
	0.00	0.00	000.0	0.0	0.0	0.00	0.00	0.0		

600 0 0.00 0.00 600 0 1483.0 13.25 312.67 1475.2 4796.0 13.25 312.67 4700.0 2 3 4 0.0 68.9 583.3 -74.7 1.50 312.67 101.6 -632.8 0.00 0.00 860.7 R-18-9-17 TGT -840.5 0.00 0.00 1143.1 6028.8 13.25 312.67 5900.0 774.8



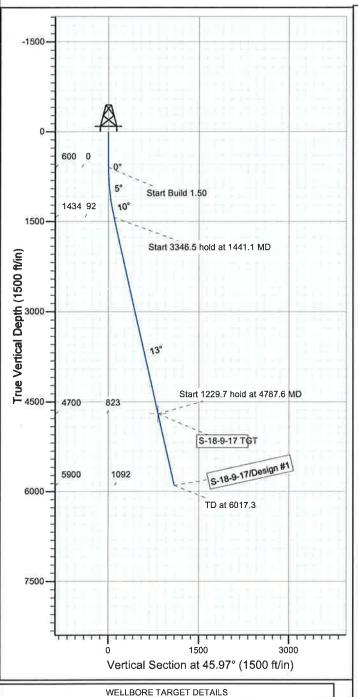
Well: S-18-9-17 Wellbore: Wellbore #1 Design: Design #1

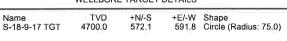


Azimuths to Grid North True North: -0.93° Magnetic North: 10.47°

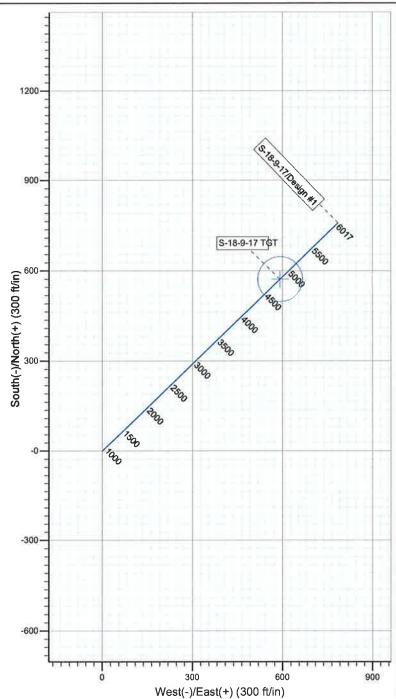
Magnetic Field Strength: 52336.1snT Dip Angle: 65.80° Date: 2010/09/15 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'









Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1441.1	12.62	45.97	1434.3	64.1	66.3	1.50	45.97	92.2	
4	4787.6	12.62	45.97	4700.0	572.1	591.8	0.00	0.00	823.1	S-18-9-17 TGT
5	6017.3	12.62	45.97	5900.0	758.8	784.9	0.00	0.00	1091,7	

SECTION DETAILS

#### WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 11/24/2010 **API NO. ASSIGNED:** 43013505050000 WELL NAME: Greater Monument Butte I-18-9-17 **OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825 **CONTACT:** Mandie Crozier PROPOSED LOCATION: SENE 18 090S 170E **Permit Tech Review: SURFACE: 1808 FNL 0790 FEL Engineering Review: BOTTOM:** 1106 FNL 1638 FEL Geology Review: **COUNTY: DUCHESNE LATITUDE:** 40.03320 **LONGITUDE:** -110.04192 UTM SURF EASTINGS: 581745.00 **NORTHINGS: 4431672.00** FIELD NAME: MONUMENT BUTTE LEASE TYPE: 1 - Federal **LEASE NUMBER: UTU-72106** PROPOSED PRODUCING FORMATION(S): GREEN RIVER SURFACE OWNER: 1 - Federal **COALBED METHANE: NO RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** ✓ PLAT R649-2-3. Unit: GMBU (GRRV) Bond: FEDERAL - WYB000493 **Potash** R649-3-2. General Oil Shale 190-5 **Oil Shale 190-3** R649-3-3. Exception Oil Shale 190-13 **Drilling Unit** Board Cause No: Cause 213-11 Water Permit: 437478 **Effective Date:** 11/30/2009 **RDCC Review:** Siting: Suspends General Siting **Fee Surface Agreement Intent to Commingle** ✓ R649-3-11. Directional Drill **Commingling Approved** 

**Comments:** 

Stipulations:

4 - Federal Approval - dmason 15 - Directional - dmason 27 - Other - bhill

Presite Completed

API Well No: 43013505050000



### State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

#### Permit To Drill

\*\*\*\*\*

Well Name: Greater Monument Butte I-18-9-17

API Well Number: 43013505050000 Lease Number: UTU-72106 Surface Owner: FEDERAL

**Approval Date:** 12/6/2010

#### Issued to:

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

API Well No: 43013505050000

#### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas Form 3160-3 (August 2007)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

#### 5. Lease Serial No. UTU-72106

APPLICATION FOR PERMIT TO	6. If Indian, Allotee NA	or Tribe Name			
la. Type of work:  DRILL  REENTE	ER			7. If Unit or CA Agree Greater Monum	•
lb. Type of Well: Oil Well Gas Well Other	Lease Name and V     Greater Monum	Vell No. ent Butte <b>I</b> -18-9-17			
Name of Operator Newfield Production Company				9. API Well No. 43 OV3	50505
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (i (435) 64	nclude area code) 16-3721		10. Field and Pool, or E Monument Butte	• •
4. Location of Well (Report location clearly and in accordance with an	y State requirement	s.*)		11. Sec., T. R. M. or Bl	k. and Survey or Area
At surface SE/NE 1808' FNL 790' FEL Sec. 18, T95	R17E (UTU	-72106)		Sec. 18, T9S R	17E
At proposed prod. zone NW/NE 1106' FNL 1638' FEL Sec	. 18, T9S R17	E (UTU-3563)			
14. Distance in miles and direction from nearest town or post office* Approximately 15.0 miles southeast of Myton, UT				12. County or Parish  Duchesne	13. State
15. Distance from proposed* location to nearest property or lease line, ft. Approx. 214' f/lse, NA' f/unit (Also to nearest drig. unit line, if any)	16. No. of acre		17. Spacin	g Unit dedicated to this w	vell
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1003'	19. Proposed D 6,068	-		BIA Bond No. on file VYB000493	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5427' GL	22 Approxima	te date work will star Vr7v. 201	t*	23. Estimated duration (7) days from SPU	
	24. Attachi				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Or	der No.1, must be at	tached to thi	is form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System)</li> </ol>		<ol> <li>Bond to cover the Item 20 above).</li> <li>Operator certification</li> </ol>	•	ns unless covered by an	existing bond on file (see
SUPO must be filed with the appropriate Forest Service Office).		•		ormation and/or plans as	may be required by the
25. Signature Kerneli Crom	Name (P Mandie	rinted/Typed) Crozier			Date 10
Title Regulatory Specialist					•
Approved by (Signature)	Name (P	rinted/Typed)  Jerry K	enczk	(a	Date OCT 0 5 2
Title Assistant Field Manager	Office	VFRNA		D OFFICE	

11

Lánds & Mineral Resources

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to Conditions of approval, if any, are attacked

Title I8 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

**NOTICE OF APPROVAL** 

**RECEIVED** OCT 2 1 2011

DIV. OF CIL, GAS & MINING



NOV 2 9 2010

BLIGVERNAL, UTAH





# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-440



#### **CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company:	Newfield Production Company	Location:	SENE, Sec. 18, T9S, R17E (S)
			NWNE, Sec. 18, T9S, R17E (B)
Well No:	<b>Greater Monument Butte I-18-9-17</b>	Lease No:	UTU-72106
API No:	43-013-50505	Agreement:	<b>Greater Monument Butte Unit</b>

**OFFICE NUMBER:** 

170 South 500 East

(435) 781-4400

**OFFICE FAX NUMBER: (435) 781-3420** 

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <u>ut_vn_opreport@blm.gov</u> .
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	_	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 7 Well: GMB I-18-9-17 9/7/2011

#### SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

#### **CONDITIONS OF APPROVAL:**

- Prior to any surface disturbing activities between March 1<sup>st</sup> and August 31<sup>st</sup>, a BLM biologist or a BLM-approved contractor will survey all areas during April or May within a range of a half-mile from proposed surface disturbances for active raptor (ferruginous likely) nests. If occupied/active raptor nests are found, construction will not occur during the nesting season for that species within the half-mile buffer.
- White-tailed prairie dog burrows and animals sighted will be recorded/ mapped while conducting burrowing owl surveys. These shall be conducted according to protocol.
- Mountain plover surveys will be conducted to protocol by a professional environmental consulting firm biologist prior to any ground disturbing activities. Reports from survey results must be reviewed by a BLM authorized officer prior to proceeding with the project.
- After cessation of drilling and completion operations, any visible or measurable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.
- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with long-term successful re-vegetation.

#### Reclamation

• Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM.

Page 3 of 7 Well: GMB I-18-9-17 9/7/2011

- The reclamation seed mix will incorporate low growing grasses, instead of crested wheatgrass, which negatively impacts mountain plover habitat.
- Appropriate erosion control and re-vegetation will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Newfield and, if necessary, modifications will be made to control erosion.

#### Seed Mix (Interim and Final Reclamation)

Common Name	Latin Name	Pure Live Seed (lbs/acre)	Seed Planting Depth
Squirreltail grass	Elymus elymoides	2.0	1/4 - 1/2"
Needle and thread grass	Hesperostipa comata	2.0	1/2"
Siberian Wheatgrass	Agropyron fragile	2.0	1/2"
Shadscale saltbush	Atriplex confertifolia	2.0	1/2"
Four-wing saltbush	Atriplex canescens	2.0	1/2"
Gardner's saltbush	Atriplex gardneri	2.0	1/2"
Blue flax (Lewis flax)	Linum lewisii	1.0	1/8 - 1/4"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.

#### Monitoring and Reporting

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) three (3) growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).

Page 4 of 7 Well: GMB I-18-9-17 9/7/2011

#### DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

• Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with the lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

Page 5 of 7 Well: GMB I-18-9-17 9/7/2011

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: GMB I-18-9-17 9/7/2011

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - o Well name and number.
  - o Well location (1/41/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval of
  the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 20252 API Well Number: 43013505050000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-72106
SUNDF	RY NOTICES AND REPORTS (	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposition bottom-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)		
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GREATER MON BUTTE I-18-9-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COM	IPANY		9. API NUMBER: 43013505050000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84		E NUMBER:	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1808 FNL 0790 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENE Section: 18	Township: 09.0S Range: 17.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT	, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
_	☐ ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
12/6/2011	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
SUBSEQUENT REPORT	☐ DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
_	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date:	□ WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all perti	nent details including dates, denths	volumes etc
	s to extend the Application for		voidines, etc.
	• •		
			Approved by the Utah Division of
			Oil, Gas and Mining
			_
			Pate: 11/23/2011
			R Deall W
		•	SA: Tree Charles
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE Degulatory Tech	
Mandie Crozier	435 646-4825	Regulatory Tech	
SIGNATURE N/A		<b>DATE</b> 11/9/2011	

Sundry Number: 20252 API Well Number: 43013505050000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013505050000

**API:** 43013505050000

Well Name: GREATER MON BUTTE I-18-9-17

Location: 1808 FNL 0790 FEL QTR SENE SEC 18 TWNP 090S RNG 170E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

**Date Original Permit Issued:** 12/6/2010

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?   Yes  No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed? 🔵 Yes 🌘 No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No

**Signature:** Mandie Crozier **Date:** 11/9/2011

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY

### BLM - Vernal Field Office - Notification Form

	erator Newfield Exploration Rig Name/# SSA	
	mitted By <u>Jim Smith</u> Phone Number <u>823-207</u>	<u>2</u>
	Name/Number <u>GMBU I-18-9-17</u>	
	Qtr <u>SE/NE</u> Section <u>18</u> Township <u>9S</u> Range 17E	
	se Serial Number <u>UTU- 72106</u> Number 43-013-50505	
HLI	Number 45-015-50505	
Spuc	d Notice – Spud is the initial spudding of the well,	. not drillina
_	below a casing string.	, <b>g</b>
	Date/Time AM PM	
<u>Casi</u>	ing – Please report time casing run starts, not cer	nenting
time	es.	
	Surface Casing	
	Intermediate Casing	
	Production Casing	
	Liner	RECEIVED
	Other	JUN 05 2012
	Date/Time AM _ PM _	V. OF OIL, GAS & MINING
ВОР	PE	
	Initial BOPE test at surface casing point	
	BOPE test at intermediate casing point	
	30 day BOPE test	*
	Other	
	Data/Time (/C/12) 12:00 ANA	
	Date/Time <u>6/6/12</u> <u>12:00</u> AM ☐ PM ☐	

Remarks Rig move notice

### BLM - Vernal Field Office - Notification Form

By B Well Qtr/C Leas API	randen Arnold Phone Normal Name/Number GMBU I Qtr SE/NE Section 18 To Se	-18-9-17 ownship <u>9S</u> Range 17E	
ouc.	5 5		
	Date/Time <u>6/2/12</u>	9:00 AM 🔀 PM 🔝	
Casin time		casing run starts, not ce	menting
	Date/Time <u>6/2/12</u>	<u>2:00</u> AM ☐ PM ⊠	
BOP	Initial BOPE test at sur BOPE test at intermedia 30 day BOPE test Other	ate casing point	RECEIVED JUN 0 1 2012 DIV. OF OIL, GAS & MINING
	Date/Time	AM [_] PM [_]	
Rem	arks		

OPERATOR: NEWFIELD PRODUCTION COMPANY

OPERATOR ACCT. NO.

N2695

ADDRESS: RT. 3 BOX 3630 MYTON, UT 84052

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO,	API NUMBER	WELL NAME			LL LOCA			SPUD DATE	EFFECTIVE DATE
JUNE	ENTIST NO.	ENTIT NO.			- 00	SC	41	RG	COUNTY	DATE	DATE
A	99999	18583	4301350672	UTE TRIBAL 16-4-4-4W	SESE	4	48	4W	DUCHESNE	5/30/2012	6/20/12
WELL 1 CO	MMENTS:								1	UNICIAL	
01	RRV B	HL: SO	esw						V	UNITULIT	. 11 <b>1</b> L
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	SC	LL LOCA	TION	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350506	GMBU L-18-9-17	SENE	18	95	17E	DUCHESNE		6/20/12
		_			····						
<u></u> (3)	RRY P	HL: n	iuse_								
ACTION B	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	- 00	SC	LL LOCA	NON RG	COUNTY	SPUD DATE	EFFECTIVE
В	99999	17400	4301350505	GMBU I-18-9-17	SENE	18	95	17E	DUCHESNE	6/2/2012	612012
						•		•	<del>*</del>		
(7)	2RV	BHL:	nune								<del></del>
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	GQ.	WE SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350826	GMBU H-33-8-17	NENW	33	85		DUCHESNE	6/5/2012	6/20/12
GR	D./ D	HL SU	)h 0								-
ACTION	CURRENT	NEW	API NUMBER	WELL NAME			LL LOCAT			SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO.			OC.	SC	TP	RG	COUNTY	DATE	DATE
В	99999	17400	4301350157	GMBU 1-32-8-16H	NENE	32	88	16E	DUCHESNE	5/31/2012	6120112
Car	2RV									CONFID	
ACTION	CURRENT ENTITY NO.	NEW ENTITY NO,	API NUMBER	WELL NAME	00	WE SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350508	GMBU R-18-9-17	SWSE	18	98		DUCHESNE	6/17/2012	6120112
		<u> </u>							·		
<u>GR</u>	1 \ V			RECEIVED						(, ,	
	DES (See instructions on bac w entity for new well (single	-							Y last	はっか	
B - / we	II to existing entity (group or	unit well)		IIIN 19 2012				<	<u> </u>	, <u> </u>	Tabitha Timothy

C - from one existing entity to another existing entity

D - well from one existing entity to a new entity

E - ther (explain in comments section)

JUN 19 2012

Div. of Cil. Gas & Mining

Signature **Production Clerk** 

06/20/12

FORM 3160-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31,2010

SUNDRY Do not use t abandoned w	BUREAU OF LAND MANAGI  NOTICES AND REPORT his form for proposals to dell. Use Form 3160-3 (APD)	TS ON WELL rill or to re-en for such pro	ter an posals.		2106 lottee or Tribe Name.
	TRIPLICATE - Other Ins	tructions on p	nage 2	7. If Unit or CA GMBU	A/Agreement, Name and/or
1. Type of Well Gas Well	Other			8. Well Name a	and No.
2. Name of Operator				GRTR MON I	BUTTE I-18-9-17
NEWFIELD PRODUCTION CO 3a. Address Route 3 Box 3630		b. Phone (inc	lude are code)	9. API Well No 4301350505	<b>.</b>
Myton, UT 84052		435.646.3721	rude are codely		ool, or Exploratory Area
4. Location of Well (Footage, L	Sec., T., R., M., or Survey Description	on)		GREATER M	
				11. County or F	arish, State
Section 18 T9S R17E				DUCHESNE	
12. CHECK	APPROPRIATE BOX(ES)	TO INIDICA	TE NATURE O	F NOTICE, OR C	OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACT	ON	
<ul><li>Notice of Intent</li><li>✓ Subsequent Report</li><li>✓ Final Abandonment</li></ul>	Acidize  Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construct Plug & Abanct Plug Back	tion Reco	uction (Start/Resume) amation mplete porarily Abandon or Disposal	Water Shut-Off Well Integrity Other Spud Notice
On 6/2/12 MIRU Ross #2 @ 325.57. On 6/4/12 cen yield. Returned 5 barrels	9. Spud well @9:00 AM. Drill nent with 160 sks of class "G cement to pit. WOC.	325' of 12 1/4  " w/ 2% CaCL:	" hole with air m 2 + 0.25#/sk Cell	st. TIH W/ 7 Jt's 8 o- Flake Mixed @	3 5/8" J-55 24# csgn. Set 3 15.8ppg w/ 1.17ft3/sk
					RECEIVED
					JUL 0 3 2012
					DIV. OF OIL, GAS & MINING
I hereby certify that the foregoing is correct ( <i>Printed Typed</i> )  Branden Arnold	true and	Title			
Signature Franka !	121	Date 06/04/2	2012		
Warday 1	THIS SPACE FOR			FICE USE	
					The second secon
Approved by  Conditions of approval, if any, are attach certify that the applicant holds legal or ewhich would entitle the applicant to cons	ed. Approval of this notice does not war juitable title to those rights in the subject	rant or lease	Title Office		Date

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

# Casing / Liner Detail

Well	GMBU	I-18-9-17	7					
Prospect	Monum	ent Butte	)	george gar agen an george george george george george george gan en y syche der die fie febre 2 e Ophi In de state george		uniperior un professional Proposition (and in the contract of		
Foreman								
Run Date:								
String Type	Surface	8 625"	24# .	I-55, STC (Ge	neric)	the state of the s		
,		, 0.020 ,	27/F; V	mania dinggan dan makamatan da dagan dan dan dan da sa	ergamente gambangan ng maphinalanjaha injumana simundah pelansipakan ini bing sebabahangan seperahan	de-Louisvillandor		
<u></u>	····	<del></del>		- Deta	I From Top To Botton	n = 	· · · · · ·	
Depth	Leng	th J	TS		Description		OD	ID
			r	ICD 40 ET			<del></del> -1	
326.15				KB 10 FT				
326.15	1.42	:		Wellhead				
327.57	-2.0		-1	Cutoff			8.625	
10.00	269.3	15	6	8 5/8" Casing			8.625	
279.35	45.9	5.90 1 Shoe JT					8.625	
325.25	0.90		1	Guide Shoe			8.625	
326.15				:)				
					Cement Detail			
Cement Com								
Slurry # 6 Slurry 1	of Sacks   W 160	eight (ppg) 1.58	Yield 1.17	Volume (ft³) 187.2	Descri Class G 2% CACL 2% Celloft	ption - Slurry Class and Additive ake	98	
Stab-In-Job?					······································			
HT:			No 0		<u></u>	ment To Surface?	Yes	j
nitial Circulation	n Pressure:					. Top of Cement: gs Bumped?	0	
nitial Circulation						ssure Plugs Bumped:	Yes 475	
inal Circulatio			<del>-</del>		<del></del>	ats Holding?	475 No	
inal Circulatio	n Rate:				<b></b>	sing Stuck On / Off Bottom?	· No	
isplacement F		1	Vater			sing Reciprocated?	No	····
isplacement F						sing Rotated?	No	
isplacement \	/olume:		17.1		CIP	T T T T T T T T T T T T T T T T T T T	9:19	
ud Returns:						sing Wt Prior To Cement:		
entralizer Typ			***			ing Weight Set On Slips:		
iddle of the fir	st and every	other for a	total of	3		5 5		

Sundry Number: 28990 API Well Number: 43013505050000

	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	ì	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-72106
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal I n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GREATER MON BUTTE I-18-9-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43013505050000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,		NE NUMBER: t	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1808 FNL 0790 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 1	IIP, RANGE, MERIDIAN: 8 Township: 09.0S Range: 17.0E Meridian: \$	8	STATE: UTAH
11. CHECK	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
l .	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  ✓ PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF		CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:  Epths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining  FOR RECORD ONLY  August 16, 2012
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE  Production Technician	
Jennifer Peatross  SIGNATURE N/A	435 646-4885	Production Technician  DATE  8/15/2012	

Sundry Number: 30798 API Well Number: 43013505050000

	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOUI DIVISION OF OIL, GAS, AND M		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-72106
SUNDR	Y NOTICES AND REPORTS	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significant reenter plugged wells, or to drill horiz n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GREATER MON BUTTE I-18-9-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43013505050000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,	PHONE NUMBER: 25 Ext	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1808 FNL 0790 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 1	HP, RANGE, MERIDIAN: 8 Township: 09.0S Range: 17.0E Mer	idian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDIC	ATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
7/2/2012			
	WILDCAT WELL DETERMINATION	U OTHER	OTHER:
The above well w	completed operations. Clearly showas placed on production conduction Start Sundry re-s	on 07/02/2012 at 16:00	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY October 16, 2012
NAME (PLEASE PRINT) Kaci Deveraux	<b>PHONE NUN</b> 435 646-4867	MBER TITLE Production Technician	
SIGNATURE N/A		<b>DATE</b> 10/7/2012	

Form 3160-4 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

5. Lease Serial No.

WELL COMPL	FTION	OR RECOMPLETIC	IN REPORT	AND LOG

<u> </u>													UTU-	3563			
la. Type of	Well	Δo	il Well	Ga	s Well		Other		. D	-			6. If I	ndian, A	Allottee or T	ribe Name	)
b. Type of	Completion		ew Well ther:	⊔ w₁	ork Over	☐ Deepen ☐	l Plug Back	⊔ Diff	. Kesvr.	•			7. Un GMB	U (GR			i No.
2. Name of NEWFIEL	Operator D EXPLOR	RATION	N COMP	ANY										se Nan U I-18	ne and Well -9-17	No.	
3. Address	1401 17TH S				80202			. Phone 1 435) 646		lude ar	ea code	)		I Well 1 13-505			
						ance with Federa		,	0,21				10. Fi	eld and	Pool or Exp	ploratory	
At surfac	e 1808' FN	VL & 79	90' FEL (	SE/NE	) SEC. 1	8, T9S, R17E	(UTU-7120	06)					11 Se	c T	IT BUTTE R., M., on B	lock and	
	1000 11	12 0. 1	,, , (		,		(	,					Su	irvey or	Area SEC.	18, T9S, R1	7E
At top pro	d. interval r	eported	below 13	884' FN	L & 134	2' FEL (NW/NI	E) SEC. 18	, T9S, R	17E (U	JTU-3	563)		12. C	ounty o	r Parish	13. St	tate
At total de	epth 1152'	FNL &				EC. 18, T9S, F								HESN		UT	
14. Date Sp 06/02/201	udded			Date T.I 10/201	). Reached	1		Date Comp			2012 to Prod.				ns (DF, RKI 437'_KB	B, RT, GL)	)* 
18. Total D	epth: MD	6063	3'	<u>-</u> -		g Back T.D.:						idge Plug	Set: N	AD VD			
21. Type E	lectric & Oth		anical Log			y of each)					Was well		<b>✓</b> No		Yes (Submit		
	•	·				EUTRON,GR,	CALIPER, C	CMT BO	ND ———		Was DST Direction	run? al Survey?			Yes (Submit Yes (Submit		
23. Casing							. Stage C	ementer	No.	of Sk	s. &	Slurry \	Vol.		*		ount Pulled
Hole Size	Size/Gra		Wt. (#/ft.)	<del>  </del>	(MD)	Bottom (MD)	) De		Туре	of Ce	ment	(BBI		_eme	ent Top*	Amo	unt runea
12-1/4" 7-7/8"	8-5/8" J- 5-1/2" J-		24# 5.5#	0		326' 6063'			250 P	CLASS PRIMI				18'			<del></del>
1-1/0	0-1/2 0-	30   1	0.0#	<del>                                     </del>			-			60/50 I	<del></del> }						
	Ţ																_
24. Tubing	Record	!		<u> </u>					<u> </u>		i		L				
Size	Depth S	Set (MD		er Depth	(MD)	Size	Depth Se	et (MD)	Packer	Depth	(MD)	Size		Deptl	Set (MD)	Packe	er Depth (MD)
2-7/8" 25. Produci		<u>)</u> 5935'	TA @	5837'			26. Pe	rforation	Record						<u>, – </u>	<u> </u>	
	Formation			То	р	Bottom	Per	forated In				ize	No. H	oles		Perf. Sta	tus
A) Green	River		4	073'		5869'	4073-58	369'			0.34'		69				
B) C)											-	-	-				
D)		_					_				1		-				
27. Acid, F			Cement So	queeze, e	etc.					1 7		6-4					
4073-5869	Depth Inter	val	—— -  Fi	rac w/ :	309546#	s 20/40 white	sand in 175		Amount of Liaht				ges.				
407 0-000	<u>-</u>			ido vii	3000 1011	<u> </u>											
									_								
20 10 1		-1 A							_								<del></del>
28. Product Date First		Hours	Test		Dil		Water	Oil Gra			as		iction Me				
Produced		Tested	Produ		3BL		BBL	Corr. A	PΙ	G	ravity	2-1/	2" x 1-1.	/2" x 2	4' RHAC F	ump	
7/2/12 Choke	7/12/12 Tbg. Press.	Csg	24 Hr		64 Dil	Gas	14 Water	Gas/Oil		w	ell Stati	ıs					
Size	Flwg. SI	Press.	Rate		BBL	1 1	BBL	Ratio		1	RODU						
28a. Produc	tion - Interv	val B							-								
Date First Produced		Hours Tested	Test Produ		Oil BBL		Water BBL	Oil Gra Corr. A			as ravity	Produ	uction Me		To company II		
Choke	Tbg. Press.	Cso	24 Hr		Oil	Gas	Water	Gas/Oil		- W	ell Stati	ıs	_	R	ECE	VED	
Size	Flwg. SI	Press.	Rate		BBL		BBL	Ratio		"	******			(	ECEI	2012	
	<u>L</u>	<u> </u>				,			_								- i m <b>n</b>

								<del> </del>				·
	uction - Inte Test Date		Test	Oil	Gas	Water	Oil Gravity	y Gas		Production Method		
Produced	Test Date	Tested	Production	BBL	MCF	BBL	Corr. API	Grav	rity			
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well	Status			
28c. Produ	ıction - Inte	rval D		<u> </u>								
Date First Produced		Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	y Gas Grav	rity	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well	Status		_	
29. Dispos	sition of Gas	s (Solid, us	sed for fuel, ve	nted, etc.)								
USED FOR	FUEL											
30. Sumn	nary of Poro	us Zones	(Include Aqu	ifers):	······································			31.	Formatio	on (Log) Markers		
Show a includi recover	ng depth int	t zones of perval teste	porosity and c d, cushion use	ontents thed, time to	ereof: Cored of open, flowing	intervals and al ng and shut-in	Il drill-stem test pressures and	ts, GE	OLOGI	CAL MARKERS		
Form	nation	Тор	Bottom		Desc	criptions, Cont	ents, etc.			Name		Top  Meas. Depth
												Meas. Depui
GREEN RIV	/ER	4073'	5869'						RDEN GUI RDEN GUI		3573' 3776'	
									RDEN GUI NT 3	LCH 2	3892' 4166'	
									IRKR IRKR		4417' 4453'	
									JGLAS CI CARBONA	REEK MRK TE MRK	4582' 4821'	
									MESTON STLE PEA		4940' 5436'	
									AL CARB SATCH	ONATE	5879' 5984'	
	<del></del>		<u> </u>			· · · · · · · · · · · · · · · · · · ·	_				<u> </u>	
52. Adult	ionai reman	ns (meruur	e plugging pro	cedure).								
22 Indias	sto which its	oma hovo k	acon attached	ny placing	a check in the	e appropriate be	oves.				-	
								- 0 -		<b>[7</b> ] <b>D</b> : (1.15		
_		_	s (1 full set req g and cement v			Geologic Repo		DST Report Other:		☑ Directional Survey		
34. I here	by certify th	nat the fore	going and att	ached info	rmation is cor	nplete and corr	rect as determin	ned from all av	ailable re	ecords (see attached instruction	s)*	
			ennifer Peat					duction Tech				-
	ignature /	YU	TAKK	7			Date _08/0	8/2012				<u></u>
Title 18 U	S.C. Section	on 1001 an	d Title 43 U.S	C. Section	n 1212, make	it a crime for a	any person knov s jurisdiction.	wingly and wil	llfully to	make to any department or age	ncy of the U	nited States any

(Continued on page 3) (Form 3160-4, page 2)

#### **Daily Activity Report**

#### **Format For Sundry** GMBU I-18-9-17 5/1/2012 To 9/30/2012

6/23/2012 Day: 1

Completion

Rigless on 6/23/2012 - NU Weatherford BOPs & FMC frac valve. Run CBL w/ 0 pressure on well, Pressure test csq & well control stack, Perforate stage 1. - NU FMC 5K frac valve & Weatherford BOPs. RU Perforators LLC WLT. Run cement bond log w/ 0 psi on well. WLTD @ 5998'. Top of cement @ 48'. Max recorded temp 144° (OH log). Pressure test Csg to 4300 psi & chart for 30 min. Pressure test each component of the well control stack w/ low test of 200-300 psi for 5 min and high test of 5000 psi for 10 min. Pressure test lubricator to 5000 psi. RIH w/ 3-1' 3-1/8" slick guns w/ 3 SPF 120 deg phasing, 0.34 EH 16 gram charges. Perforate CP5 sds @ 5868-69', 5860-61' & 5851-52'. POH w/ WL & RD.

Daily Cost: \$0

Cumulative Cost: \$19,454

#### 6/26/2012 Day: 2

Completion

Rigless on 6/26/2012 - frac and Floback Well - RU Xtreme WL & 4-G Tester press test Lube to 5000psi. Open Well @ 1559 psi RIH w/ CFTP & 3-1/8 Csg Guns 3 SPF set CFTP @ 4730' & perforat the D2, D1 Formation @ 4664,65', 4657-59', 4664-4665', (12 holes) POOH RD WL CWI, Missrun plug won't set 1.5 hrs down time - RU BJ Safety Meeting JSA. Press test Lines to 5200 psi. Open Well @ 936 psi Break DownD2,D1 formation (12 holes) @ 2538i @ 4.2 BPM W/ 2bbls7% KCL Water40.5 bbl7% KCL To get Rate, 15 BBls to get X link pump 10.7lbbls to 4# 20/40 sand (ramped) 213bbls 4# to5# 20/40 sand (ramped) 37bb, 6# 20/40 sand, 12 bbls 15% HCL, 110.2bls 7% KCL Flush. ISIP 1955i, FG &88, Max Press 3507 psi, Avg Press 3141 psi, Max Rate 40.1 BPM Avg Rate 36.4BPM.65,24940 White Sand in Formation. 532,BBls Pumped - RU Xtreme WL & 4-G Tester press test Lube to 5000psi. Open Well @ 1559 psi RIH w/ CFTP & 3-1/8 Csq Guns 3 SPF set CFTP @ 4730' & perforat the GB4 formation,4110-11,.4105-06,4099-00, 4087-88, 4079-80,4073-74 (18 Holes) - RU BJ Safety Meeting JSA. Press test Lines to 5200 psi. Open Well @ 936 psi Break Downgb4 formation (18 holes)Break @ 1447 @ 412 BPM W/ 2bbls7% KCL Water118 bbl 7% KCL To get Rate, 15 BBls to get X link pump 126.7 lbbls 2.5 to 4# 20/40 sand (ramped) 247.6 bbls 4# to5# 20/40 sand (ramped) 87 bbls, 6# 20/40 sand, ,96.6.2 bbls 7% KCL Flush. ISIP 1695, FG .87, Max Press 2857 psi, Avg Press 2602 psi, Max Rate 44.3 BPM Avg Rate 41.9 BPM. 79,998 White Sand in Formation.668 ,BBIs Pumped - RU BJ Safety Meeting JSA. Press test Lines to 5200 psi. Open Well @ 1447i Break Down CP1formation (18 holes) @ 1511i @ 4.1 BPM W/ 2bbls 118.5BBLS KCL To get Rate, 15 BBIs to get X link pump 123.8 bbls 2# to 4# 20/40 sand (ramped) 247.4# to5# 20/40 sand (ramped) 39.2 bbl 6# 20/40 sand, 12 bbls 15% HCL, 26.6 bbls 7% KCL Flush. ISIP 1723 psi, FG ..76, Max Press 2889 psi, Avg Press 2657 psi, Max Rate 44.3 BPM Avg Rate 42.2 BPM.79,918# 20/40 White Sand in Formation. 736.4 total BBIs Pumped -RU Xtreme WL & 4-G Tester press test Lube to 5000psi. Open Well @ 1657 psi RIH w/ CFTP & 3-1/8 Csq Guns 3 SPF set CFTP @ 5600' & perforat the CP1 Formation @ 5523-25', 5510-12',5499-00',5486-87, (18 holes) POOH RD WL CWI - RU BJ Safety Meeting JSA. Press test Lines to 5200 psi. Open Well @ 100 psi Break Down CP5 formation (9 holes) @ 3466 psi @ 4.1 BPM W/ 3.3bbls 7% KCL. Pump 6 bbls 15% HCL56.9 bbls 7% KCL To get Rate, 15 BBls to get X link pump 79.5bbls 2# to 4# 20/40 sand (ramped) 175 bbls 4# to5# 20/40 sand (ramped) 39.2 bbl 6# 20/40 sand, 12 bbls 15% HCL, 39.3 bbls 7% KCL Flush. ISIP 2176 psi, FG ..78, Max Press 3515 psi, Avg Press 3023 psi, Max Rate 31.1 BPM Avg Rate 28.1 BPM.44,947# 20/40 White Sand in Formation. 462 total BBIs Pumped - RU Xtreme WL & 4-G Tester press test Lube to 5000psi. Open Well @ 1455 psi RIH w/ CFTP & 3-1/8 Csg Guns 3 SPF set CFTP @ 5270' & perforat the LODC,A1 Formation @ 5209-10', 5205-06',519900',5083-84,5080-81, (15 holes) POOH RD WL CWI - RU BJ Safety Meeting JSA. Press test Lines to 5200 psi. Open Well @ 936 psi Break Down LODC, A1 formation (15 holes) @ 1465 psi @ 4.4 BPM W/ 2bbls7% KCL Water 91.3 bbls 7% KCL To get Rate, 15 BBls to get X link pump 64.2 bbls 2# to 4# 20/40 sand (ramped) 129.7 bbls 4# to5# 20/40 sand (ramped) 24 bbl 6# 20/40 sand, 12 bbls 15% HCL, 120.9 bbls 7% KCL Flush. ISIP 1775 psi, FG ¿80, Max Press 3507 psi, Avg Press 3141 psi, Max Rate 40.1 BPM Avg Rate 36.4BPM.39,482# 20/40 White Sand in Formation. 458 total BBIs Pumped - Flowback open well 1500 psi 20/64 choke @ 3 bpm

Daily Cost: \$0

Cumulative Cost: \$206,533

#### 6/29/2012 Day: 3

Completion

Stone #8 on 6/29/2012 - Pressure test bops pu tgb - miru Stone rig 8 - miru Stone rig 8 -Road Rig to Loc - Road Rig to Loc - ND frac valve nu bop change out 2 3/8 offset blocks to 2 7/8 pressure test #1 rams no test , test #2 rams to 4800 psi good test ,test kill valves inside no test ,change out #1 rams and kill valves test #1 good testto 4800 psi test kill valves to 4800 psi good test on both valves - RU rig floor make up bha 4 3/4 chopmper bit 1 joint 2.875 6.5# j55 eue tbg xn nipple - RU rig floor make up bha 4 3/4 chopmper bit 1 joint 2.875 6.5# j55 eue tbg xn nipple - Rih pu 127 joints 2.875, 6.5 # j-55 eue tbg tag kill plug 3990 secue well sdfn - Rih pu 127 joints 2.875, 6.5 # j-55 eue tbg tag kill plug 3990 secue well sdfn -Have Morning Saftey Meeting ,JSA , Mi Ru 2.5 Power swivle - Have Morning Saftey Meeting ,JSA , Mi Ru 2.5 Power swivle - Rih drill Kill plug 3990' 15 min drill time well lowing to tank light oil cut , Rih 7 joints 2.875 6.5# j-55 tbg tag on plug 4180 drill plug 14 min drill time circ 10 min 4 bpm sd rih 20 joints 2.875 6.5# j-55 tbg tag up 4100' wash down 3pm to 4180 drill plug 25 min drill time circ 5 min 5 bpm , rih to 17 joints 2.875 6.5# j-55 tbg tag up 5170' wash donw to to plug 3 bpm, drill plug @ 5270' 43 min drill tbg circ 20 min 5 bpm rih to 5600 tag up and drill plug 24 min drill time rih tag up 5720' was thru bridge 60' rih tag up 5930' wash down to pbtd 6038 - Rih drill Kill plug 3990' 15 min drill time well lowing to tank light oil cut , Rih 7 joints 2.875 6.5# j-55 tbg tag on plug 4180 drill plug 14 min drill time circ 10 min 4 bpm sd rih 20 joints 2.875 6.5# j-55 tbg tag up 4100' wash down 3pm to 4180 drill plug 25 min drill time circ 5 min 5 bpm , rih to 17 joints 2.875 6.5# j-55 tbg tag up 5170' wash donw to to plug 3 bpm, drill plug @ 5270' 43 min drill tbg circ 20 min 5 bpm rih to 5600 tag up and drill plug 24 min drill time rih tag up 5720' was thru bridge 60' rih tag up 5930' wash down to pbtd 6038 - LD 1 Joint Rd swivel pooh 1 stand 2.875 6.5# j-55 tbg secure well sdfn - LD 1 Joint Rd swivel pooh 1 stand 2.875 6.5# j-55 tbg secure well sdfn - ND frac valve nu bop change out 2 3/8 offset blocks to 2 7/8 pressure test #1 rams no test , test # 2 rams to 4800 psi good test ,test kill valves inside no test ,change out #1 rams and kill valves test #1 good testto 4800 psi test kill valves to 4800 psi good test on both valves

Daily Cost: \$0

**Cumulative Cost:** \$218,648

#### 7/1/2012 Day: 5

Completion

Stone #8 on 7/1/2012 - swab , POOH RIH land well nu well head - sitp 300 psi sicp 300 psi open and flow tbg to tank for 1 hr recover 60 bbl pull 9 swab runs recover 90 bbl minmal sand last 3 runs, RD swab, trace oil gassy , Roll Hole 150 bbl 7% kcl water POOH LD 4 3/4 Chomper Bit ,Pump off sub, xn nipple , make up New BHA 2 7/8 NC , 2 Joints 2 7/8 6.5 # j-55 tbg, PSN ,1 Joint 2 7/8 6.5# j-55 tbg, 5.5 tbg ancor,185 Joints 2 7/8 6.5# 2 7/8 tbg , tbg hanger,Rolll Hole 150 bbl 7% kcl water ,drop in hanger strip off bop's pull hanger set tbg ancor 18 k tension ,install production hanger land tbg , eot 5925.16, PSN 5861.78',NU Well head secure well sdfn - WSI - arive loc, Saftey JSA

Daily Cost: \$0

**Cumulative Cost:** \$274,618

7/3/2012 Day: 6 Completion

Stone #8 on 7/3/2012 - run rods hook up pump jack - 600 TO 700 CREW TRAVEL SAFETY MEETING TOPIC PU RODS RU UNIT RD RU 300 # ON WELL 700 OPEN CSG AND FLUSH TBG W/ 50 BBL CHANGE OVER TO RODS 800 PU AND PRIME PUMP 27 7/8" 8 PERS 124 3/4" 4 PERS 50 7/8" 4 PERS 32 7/8" 8 PERS 2' PONY POLISH ROD 1200 FILL TBG W/ 1/4 BBL TEST TO 800 # GOOD TEST RU UNIT RIG DOWN MOVE TO L-18 AND RIG UP WATED ON WIND A POLISH ROD 1 1/2" 1 30 A PONY ROD 7/8" 1 2 A 8 PERS 7/8" 32 800 A 4 PERS 7/8" 50 1250 A 4 PERS 3/4" 124 3100 A 8 PERS 7/8" 27 675 A PUMP 1 1/2" 1 0 Finalized

Daily Cost: \$0

Cumulative Cost: \$331,323

Pertinent Files: Go to File List



### **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 18 T9S R17E I-18-9-17

Wellbore #1

Design: Actual

## **Standard Survey Report**

09 July, 2012





Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 18 T9S R17E

Site: Well:

I-18-9-17

Wellbore:

Wellbore #1

Actua!

Local Co-ordinate Reference:

**TVD Reference:** 

MD Reference:

Database:

Well I-18-9-17

I-18-9-17 @ 5439.0ft (NDSI SS #2) I-18-9-17 @ 5439.0ft (NDSI SS #2)

North Reference:

Survey Calculation Method:

Minimum Curvature EDM 2003.21 Single User Db

Design: Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

North American Datum 1983

Geo Datum: Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site

From:

Weli

SECTION 18 T9S R17E

Site Position:

Map

Northing: Easting:

7,183,900.00 ft 2,049,800.00 ft

Latitude: Longitude:

40° 1' 56,921 N 110° 2' 16.332 W

**Position Uncertainty:** 

0.0 ft

Slot Radius:

**Grid Convergence:** 

0.94°

I-18-9-17, SHL LAT: 40° 01' 59.42, LONG: -110° 02' 33.70

Well Position

+N/-S +E/-W 0.0 ft 0.0 ft Northing: Easting:

7,184,130.78 ft 2,048,445.24 ft Latitude: Longitude: 40° 1' 59,420 N

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5,439.0 ft

**Ground Level:** 

110° 2' 33.700 W 5,427.0 ft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle

Field Strength

(nT)

IGRF2010

9/13/2010

11.40

65.81

52,342

Design

Actual

1.0

Audit Notes:

Version:

Phase:

ACTUAL

Tie On Depth:

0.0

**Vertical Section:** 

Depth From (TVD) (ft)

0.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°) 308.46

Survey Program

7/9/2012

From

To (ft)

Survey (Wellbore)

**Tool Name** 

Description

406.0

6,063.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
406.0	0.20	21.50	406.0	0.7	0.3	0.2	0.05	0.05	0.00
438.0	0.40	339.30	438.0	8.0	0.2	0.3	0.89	0.63	-131,88
468.0	0.50	8.60	468.0	1.0	0.2	0.5	0.82	0.33	97.67
498.0	0.70	33.70	498.0	1.3	0.3	0.6	1.09	0.67	83.67
529.0	1.30	306.50	529.0	1.7	0.2	0.9	4.66	1.94	-281.29
559.0	2.00	305.00	559.0	2.2	-0.5	1.8	2.34	2.33	-5.00
590.0	3.30	308.90	589.9	3.1	-1.7	3.2	4.23	4.19	12.58
620.0	4.10	311.10	619.9	4.3	-3.2	5.2	2.71	2.67	7.33
651.0	4.80	307.30	650.8	5.8	-5.0	7.6	2.45	2.26	-12.26
681.0	5.00	308.80	680.7	7.4	-7.0	10.1	0.79	0.67	5.00
712.0	5.20	314.00	711.6	9.2	-9.1	12.9	1.62	0.65	16.77
742.0	4.90	314.90	741.4	11.1	-11.0	15.5	1.03	-1.00	3.00



Survey Report



Company: Project:

NEWFIELD EXPLORATION

USGS Myton SW (UT)

Site: Well: SECTION 18 T9S R17E

Wellbore:

I-18-9-17 Wellbore #1 Actual

Local Co-ordinate Reference:

Well I-18-9-17

I-18-9-17 @ 5439.0ft (NDSI SS #2)

TVD Reference: MD Reference: North Reference:

Database:

I-18-9-17 @ 5439.0ft (NDSI SS #2)

True

**Survey Calculation Method:** 

Minimum Curvature

EDM 2003.21 Single User Db

#### Design: Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
773.0	5.40	316.80	772.3	13.1	-12.9	18.3	1.70	1.61	6.13
804.0	5.50	316.20	803.2	15.2	-14.9	21.2	0.37	0.32	-1.94
834.0	5.70	310.60	833.0	17.2	-17.1	24.1	1.94	0.67	-18.67
865.0	6.40	308.70	863.9	19.3	-19.6	27.3	2.35	2.26	-6.13
896.0	6.50	307.90	894.7	21.5	-22.3	30.8	0.43	0.32	-2.58
926.0	6.60	310.30	924.5	23.6	-25.0	34.2	0.97	0.33	8.00
957.0	6.70	307.40	955.3	25.9	-27.8	37.8	1.13	0.32	-9.35
987.0	7.00	306.90	985.0	28.0	-30.6	41.4	1.02	1.00	-1.67
1,018.0	7.60	307.30	1,015.8	30.4	-33.8	45.4	1.94	1.94	1.29
1,062.0	7.40	307.20	1,059.4	33.9	-38.3	51.1	0.46	-0.45	-0.23
1,105.0	7.40	304.60	1,102.1	37.1	-42.8	56.6	0.78	0.00	-6.05
1,149.0	7.60	307.00	1,145.7	40.5	-47.5	62.4	0.84	0.45	5.45
1,193.0	7.90	307.00	1,189.3	44.1	-52.2	68.3	0.68	0.68	0.00
1,237.0	7.90	304.30	1,232.9	47.6	-57.1	74.3	0.84	0.00	-6.14
1,281.0	8.10	305.80	1,276.4	51.1	-62.1	80.4	0.66	0.45	3.41
1,324.0	8.60	306.00	1,319.0	54.8	-67.2	86.7	1.16	1.16	0.47
1,368.0	9.10	303.90	1,362.5	58.6	-72.8	93.4	1.35	1.14	-4.77
1,412.0	9.10	302.30	1,405.9	62.4	-78.6	100.4	0.58	0.00	-3.64
1,456.0	9.80	302.20	1,449.3	66.3	-84.7	107.5	1.59	1.59	-0.23
1,500.0	10.30	298.60	1,492.6	70.2	-91.3	115.1	1.82	1.14	-8.18
1,544.0	10.50	294.10	1,535.9	73.7	-98.4	122.9	1.90	0.45	-10.23
1,587.0	10.40	296.20	1,578.2	77.0	-105.5	130.5	0.92	-0.23	4.88
1,631.0	10.50	297.40	1,621.5	80.6	-112.6	138.3	0.54	0.23	2.73
1,675.0	10.72	301.20	1,664.7	84.6	-119.7	146.3	1.67	0.50	8.64
1,719.0	10.60	303.00	1,708.0	88.9	-126.6	154.4	0.80	-0.27	4.09
1,762.0	10.60	301.40	1,750.2	93.1	-133.3	162.3	0.68	0.00	-3.72
1,806.0	10.94	303.60	1,793.4	97.5	-140.2	170.4	1.21	0.77	5.00
1,850.0	11.87	305.36	1,836.6	102.5	-147.4	179.1	2.26	2.11	4.00
1,894.0	12.30	305.00	1,879.6	107.8	-154.9	188.3	0.99	0.98	-0.82
1,938.0	12.20	308.70	1,922.6	113.4	-162.4	197.6	1.80	-0.23	8.41
1,982.0	12.20	311.10	1,965.6	119.3	-169.5	206.9	1.15	0.00	5.45
2,026.0	12.79	312.10	2,008.6	125.6	-176.6	216.4	1.43	1.34	2.27
2,070.0	13.30	308.90	2,051.4	132.1	-184.2	226.4	2.01	1.16	-7.27
2,114.0	13.60	308.20	2,094.2	138.5	-192.2	236.6	0.78	0.68	-1.59
2,157.0	14.20	307.50	2,136.0	144.8	-200.3	246.9	1.45	1.40	-1.63
2,201.0	14.00	307.50	2,178.6	151.3	-208.8	257.6	0.45	-0.45	0.00
2,245.0	13.62	306.70	2,221.4	157.7	-217.2	268.1	0.97	-0.86	-1.82
2,289.0	13.50	307.80	2,264.1	163.9	-225.4	278.4	0.65	-0.27	2.50
2,333.0	13.50	306.80	2,306.9	170.1	-233.6	288.7	0.53	0.00	-2.27
2,376.0	13.70	305.60	2,348.7	176.1	-241.7	298.8	0.80	0.47	-2.79
2,420.0	13.10	305.50	2,391.5	182.0	-250.0	309.0	1.36	-1.36	-0.23
2,464.0	12.44	304.60	2,434.4	187.6	-258.0	318.7	1.57	-1.50	-2.05
2,508.0	12.60	305.00	2,477.4	193.1	-265.8	328.2	0.41	0.36	0.91
2,552.0	13.30	306.60	2,520.3	198.8	-273.8	338.1	1.79	1.59	3.64
2,596.0	14.18	307.10	2,563.0	205.1	-282.2	348.5	2.02	2.00	1.14
2,639.0	15.25	308.90	2,604.6	211.8	-290.8	359.4	2.71	2.49	4.19
2,683.0	16.60	312.60	2,646.9	219.7	-299.9	371.5	3.84	3.07	8.41
2,727.0	17.10	313.88	2,689.0	228.5	-309.2	384.2	1.41	1.14	2.91
2,771.0	16.50	313.10	2,731.1	237.2	-318.4	396.9	1.46	-1.36	-1.77
2,815.0	15.90	312.60	2,773.4	245.6	-327.4	409.1	1.40	-1.36	-1.14
2,858.0	15.90	312.20	2,814.7	253.5	-336.1	420.9	0.25	0.00	-0.93
2,902.0	16.10	312.10	2,857.0	261.6	-345.1	433.0	0.46	0.45	-0.23
2,946.0	15.34	310.60	2,899.4	269.5	-354.1	444.9	1.96	-1.73	-3.41
2,990.0	14.25	306.50	2,941.9	276.5	-362.8	456.1	3.43	-2.48	-9.32



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 18 T9S R17E

Site: Well:

I-18-9-17

Wellbore:

Wellbore #1

Design:

Actual

Local Co-ordinate Reference:

TVD Reference:

Well I-18-9-17

I-18-9-17 @ 5439.0ft (NDSI SS #2) I-18-9-17 @ 5439.0ft (NDSI SS #2)

MD Reference: North Reference:

Survey Calculation Method:

Minimum Curvature

Database:

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,034.0	14.80	307.20	2,984.5	283.1	-371.7	467.1	1.31	1.25	1.59
3,077.0	15.15	309.20	3,026.1	290.0	-380.4	478.2	1.45	0.81	4.65
3,121.0	14.60	308.20	3,068.6	297.1	-389.2	489.5	1.38	-1.25	-2.27
3,165.0	14.20	306.20	3,111.2	303.7	-397.9	500.5	1.45	-0.91	-4.55
3,209.0	15.00	308.00	3,153.8	310.4	-406.8	511.6	2.09	1.82	4.09
3,253.0	14.80	306.70	3,196.3	317.3	-415.8	522.9	0.89	-0.45	-2.95
3,297.0	14.20	305.20	3,238.9	323.7	-424.7	533.9	1.61	-1.36	-3.41
3,340.0	14.10	304.00	3,280.6	329.7	-433.3	544.4	0.72	-0.23	-2.79
3,384.0	13.70	304.40	3,323.3	335.6	-442.1	554.9	0.93	-0.91	0.91
3,427.0	13.50	306.30	3,365.1	341.5	-450.3	565.0	1.14	-0.47	4.42
3,471.0	12.90	308.40	3,408.0	347.6	-458.3	575.0	1.75	-1.36	4.77
3,514.0	12.10	305.30	3,449.9	353.2	-465.7	584.3	2.43	-1.86	-7.21
3,558.0	11.80	303.60	3,493.0	358.3	-473.3	593,4	1.05	-0.68	-3.86
3,602.0	11.10	301.30	3,536.1	363.0	-480.6	602.1	1.90	-1.59	-5.23
3,646.0	10.60	302.40	3,579.3	367.4	-487.7	610.3	1.23	-1.14	2.50
3,690.0	10.20	302.00	3,622.6	371.6	-494.4	618.2	0.92	-0.91	-0.91
3,734.0	9.80	302.00	3,665.9	375.7	-500.9	625.8	0.91	-0.91	0.00
3,777.0	9.90	308.50	3,708.3	379.9	-506.9	633.2	2.60	0.23	15.12
3,821.0	10.70	313.40	3,751.6	385.1	-512.8	641.0	2.69	1.82	11.14
3,865.0	11.80	314.40	3,794.7	391.0	-519.0	649.6	2.54	2.50	2.27
3,909.0	12.60	317.70	3,837.7	397.7	-525.4	658.8	2.41	1.82	7.50
3,953.0	12.00	317.00	3,880.7	404.6	-531.8	668.0	1.41	-1.36	-1.59
3,996.0	11.70	315.30	3,922.8	411.0	-537.9	676.8	1.07	-0.70	-3.95
4,040.0	12.50	313.20	3,965.8	417.4	-544.5	686.0	2.07	1.82	-4.77
4,084.0	12.60	310.00	4,008.8	423.7	-551.6	695.5	1.60	0.23	-7.27
4,128.0	11.50	307.50	4,051.8	429.5	-558.8	704.7	2.77	-2.50	-5.68
4,172.0	11.20	307.70	4,095.0	434.8	-565.6	713.3	0.69	-0.68	0.45
4,216.0	11.80	307.80	4,138.1	440.2	-572.6	722.1	1.36	1.36	0.23
4,259.0	11.30	307.40	4,180.2	445.4	-579.4	730.7	1.18	-1.16	-0.93
4,304.0	11.00	306.80	4,224.4	450.7	-586.3	739.4	0.71	-0.67	-1.33
4,347.0	11.60	307.20	4,266.5	455.7	-593.1	747.9	1.41	1.40	0.93
4,391.0	11.90	312.80	4,309.6	461.5	-599.9	756.8	2.68	0.68	12.73
4,435.0	11.30	316.25	4,352.7	467.7	-606.2	765.6	2.08	-1.36	7.84
4,479.0	11.60	316.00	4,395.8	474.0	-612.3	774.2	0.69	0.68	-0.57
4,523.0	12.10	316.50	4,438.9	480.5	-618.5	783.2	1.16	1.14	1.14
4,567.0	12.90	316.60	4,481.8	487.4	-625.1	792.6	1.82	1.82	0.23
4,610.0	13.10	315.60	4,523.7	494.4	-631.8	802.2	0.70	0.47	-2.33
4,654.0	13.50	314.70	4,566.6	501.6	-638.9	812.3	1.02	0.91	-2.05
4,698.0	13.70	311.40	4,609.3	508.6	-646.5	822.6	1.82	0.45	-7.50
4,742.0	13.30	309.40	4,652.1	515.3	-654.3	832.8	1.40	-0.91	-4.55
4,786.0	12.74	308.10	4,695.0	521.5	-662.0	842.8	1.44	-1.27	-2.95
4,830.0	12.30	306.90	4,737.9	527.3	-669.6	852.3	1.16	-1.00	-2.73
4,873.0	12.40	302.70	4,779.9	532.5	-677.2	861.5	2.10	0.23	-9.77
4,888.9	12.40	302.23	4,795.5	534.4	-680.0	864.9	0.63	0.00	-2.95
I-18-9-17 TGT		204.40	4 000 0	507.6	695.0	970.0	0.62	0.00	-2.95
4,917.0	12.40	301.40	4,822.9	537.6	-685.2	870.9	0.63	-0.91	-2.95 4.55
4,961.0	12.00	303.40	4,865.9	542.5	-693.0	880.1	1.32		
5,005.0	11.80	303.90	4,909.0	547.6	-700.6 -707.9	889.1 898.2	0.51 2.11	-0.45 0.45	1.14 9.98
5,049.0	12.00	308.29	4,952.0	552.9	-707.9	898.2			
5,093.0	13.00	310.30	4,995.0	558.9	-715.3	907.7	2.48	2.27	4.57
5,136.0	13.70	309.80	5,036.8	565.3	-722.9	917.6	1.65	1.63	-1.16
5,180.0	13.20	306.30	5,079.6	571.6	-730.9	927.9	2.17	-1.14	-7.95
5,224.0	12.10	303.60	5,122.6	577.2	-738.8	937.5	2.84	-2.50	-6.14



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 18 T9S R17E

Site: Well:

1-18-9-17

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

Well I-18-9-17

I-18-9-17 @ 5439.0ft (NDSI SS #2)

MD Reference:

I-18-9-17 @ 5439.0ft (NDS/ SS #2)

North Reference:

Minimum Curvature

Survey Calculation Method: Database:

EDM 2003.21 Single User Db

e	

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
5,311.0	10.50	310.00	5,207.9	587.1	-752.4	954.3	2.20	-1.16	10.00
5,354.0	11.00	312.80	5,250.2	592.4	-758.4	962.3	1.68	1.16	6.51
5,398.0	11.50	314.70	5,293.3	598.3	-764.6	970.8	1.41	1.14	4.32
5,442.0	10.50	311,90	5,336.5	604.1	-770.7	979.2	2.58	-2.27	-6.36
5,486.0	10.50	308.00	5,379.8	609.2	-776.8	987.2	1.61	0.00	-8.86
5,530.0	11.80	307.60	5,422.9	614.4	-783.6	995.7	2.96	2.95	-0.91
5,573.0	12.90	310.49	5,464.9	620.2	-790.7	1,004.9	2.93	2.56	6.72
5,617.0	11.80	309.10	5,507.9	626.3	-797.9	1,014.3	2.59	-2.50	-3.16
5,661.0	10.70	305.90	5,551.1	631.5	-804.7	1,022.9	2.87	-2.50	-7.27
5,705.0	9.30	304.30	5,594.4	635.9	-811.0	1,030.5	3.24	-3.18	-3.64
5,749.0	8.10	301.60	5,637.9	639.5	-816.5	1,037.2	2.88	-2.73	-6.14
5,793.0	7.20	300.80	5,681.5	642.6	-821.6	1,043.0	2.06	-2.05	-1.82
5,836.0	7.60	303.40	5,724.1	645.5	-826.2	1,048.5	1.21	0.93	6.05
5,880.0	7.20	297.60	5,767.8	648.4	-831.1	1,054.1	1.92	-0.91	-13.18
5,924.0	6.50	293.80	5,811.5	650.7	-835.8	1,059.2	1.89	-1.59	-8.64
5,968.0	5.50	299.10	5,855.2	652.7	-840.0	1,063.7	2.60	-2.27	12.05
6,011.0	4.80	295.00	5,898.1	654.5	-843.4	1,067.5	1.84	-1.63	-9.53
6,063.0	4.80	295.00	5,949.9	656.3	-847.3	1,071.7	0.00	0.00	0.00

Checked By:	Approved By:	Date:	

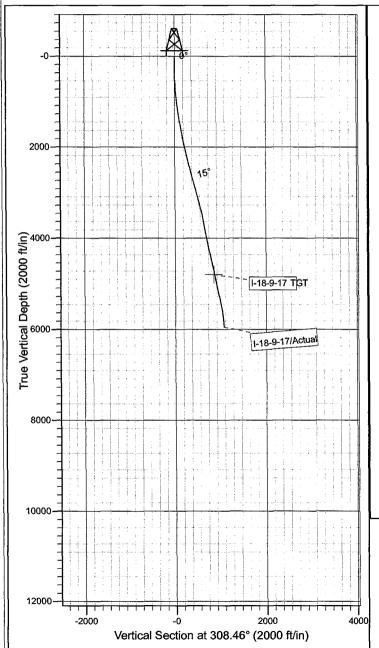


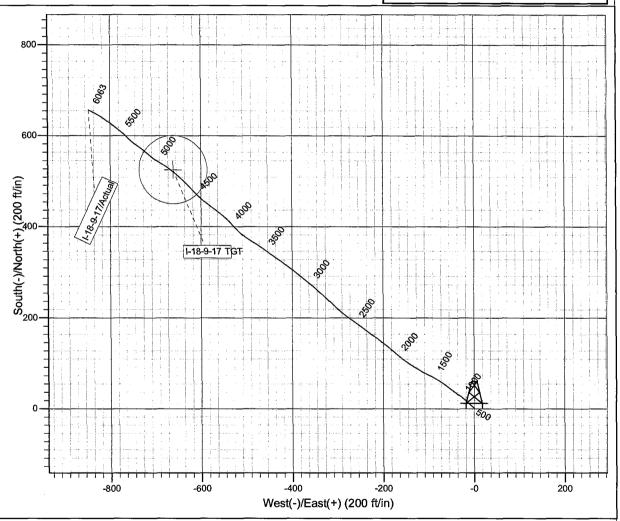
Well: I-18-9-17 Wellbore: Wellbore #1 Design: Actual



Azimuths to True North Magnetic North: 11.40°

Magnetic Field Strength: 52341.9snT Dip Angle: 65.81° Date: 9/13/2010 Model: IGRF2010





Design: Actual (I-18-9-17/Wellbore #1)

Created By: Sarah Webb

Date:

14:54, July 09 2012

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA